

INSIGHTS ON TEACHING CHESS TO THE COMMUNITY *IDEAS SOBRE LA ENSEÑANZA DEL AJEDREZ A LA COMUNIDAD*

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Abstract: The purpose of this study was to present insights on teaching chess to the community. Schools (grades K-12), colleges and universities (grades 13 and above), elderly settings, clinical groups, and correctional facilities are the five segments of the community to be featured in this report. Insights on teaching chess in each of those segments of the community are presented as well as recommendations for chess practice and teaching that emanate from the insights. Among the insights and subsequent recommendations to be presented are the following. Regarding teaching in the schools, one insight is that students respond favorably to playing against artificial opponents on a computer. A recommendation is to use chess technology including chess-related websites in schools where appropriate. Regarding teaching chess in colleges and universities, one insight is that undergraduates respond favorably to computer-based instruction. A recommendation is to employ chess technology in chess instruction in colleges and universities. Regarding teaching chess in elderly settings, one insight is that the elderly tend to be very social. A recommendation is to teach the elderly in a group-based manner. How and in what ways one teaches chess in the community depends upon the segment of the community in which the chess instruction is to occur.

Keywords: Community. correctional facilities. chess instruction. schools. chess technology.

Resumen: El objetivo de este estudio es presentar los conocimientos sobre la enseñanza del ajedrez a la comunidad. Los cinco segmentos de la comunidad que se presentan en este informe son las escuelas (grados K-12), los colegios y las universidades (grados 13 y superiores), los entornos de personas mayores, los grupos clínicos y los centros penitenciarios. Se presentan ideas sobre la enseñanza del ajedrez en cada uno de esos segmentos de la comunidad, así como recomendaciones para la práctica y la enseñanza del ajedrez que emanan de esas ideas. Entre los puntos de vista y las recomendaciones subsiguientes que se presentarán están los siguientes. En lo que respecta a la enseñanza en las escuelas, una de las conclusiones es que los estudiantes responden favorablemente a jugar contra oponentes artificiales en un ordenador. Una recomendación es utilizar la tecnología del ajedrez, incluidos los sitios web relacionados con el ajedrez, en las escuelas cuando sea apropiado. En cuanto a la enseñanza del ajedrez en los colegios y universidades, una idea es que los estudiantes universitarios responden favorablemente a la instrucción basada en el ordenador. Una recomendación es emplear la tecnología del ajedrez en la enseñanza del ajedrez en colegios y universidades. En cuanto a la enseñanza del ajedrez en entornos de personas mayores, una idea es que éstas tienden a ser muy sociables. Una recomendación es enseñar a los ancianos de forma grupal. Cómo y de qué manera se enseña el ajedrez en la comunidad depende del segmento de la comunidad en el que se va a impartir la enseñanza del ajedrez.

Palabras-clave: Comunidad. centros penitenciarios. enseñanza del ajedrez. escuelas. tecnología del ajedrez.

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1. INTRODUCTION

The purpose of this study was to explore how chess can be taught to the community. The motivation for chess training in the community is that chess training has the potential to improve the community by improving the cognitive skills of people receiving the training. Chess training has the capacity to make people more rational by improving the cognitive skills of participants such as skills at critical thinking, decision making, planning, and problem solving. Underlying advocating for chess training in the community is the belief that the community improves as the residents of the community become more rational. How chess training is to proceed in the community will vary somewhat among the sectors of the community.

Community is an expansive term encompassing an entire populace. This study will focus on five segments of the community: (1) schools (grades K-12); (2) colleges and universities (grades 13-higher); (3) senior communities; (4) clinical groups; and (5) correctional facilities. Chess technology should accompany traditional chess instruction involving a teacher wherever feasible (BART, 2016). The reason for use of chess technology whenever possible is that there is a tremendous array of useful chess-related resources readily available on the Internet that would be difficult for any chess teacher to reproduce and that any chess teacher with appropriate instructional technology could readily access to supplement and enrich chess training lessons.

The segments on chess training in five segments of the community to be provided in this report constitute a bibliographic review of how chess training can be used in various segments of the community. Central to this report is the recommendation implied in BART (2016) that chess-related technology has the capacity to enrich chess training.

2 CHESS TRAINING IN THE SCHOOLS

Chess instruction is usually oriented toward school-aged children (e.g., CAPABLANCA, 1994; COAKLEY, 2000; SADLER, 1999; SCHLOSS, 2014;

SEIRAWAN, 2003; STEAN, 2002; WEERAMANTRY & EUSEBI, 1993; WILSON, F. 1994). Chess is taught in schools throughout the world and in countries such as Armenia, Cuba, India, Israel, Russia, and many counties in the European Union. As for the U.S.A., chess is now taught in the schools in the New England State of New Hampshire. Despite the widespread use of chess training in the schools, there remains many locations in the world where chess training does not occur.

But does research support chess training in the schools? BART (2020) reviewed research to support the positive effects of chess training on scholastic achievement

(especially mathematics achievement) and cognitive skills. The review by BART (2020) provided ample evidence to support chess training in the schools.

Based upon personal experiences teaching chess to school-aged students, several insights regarding chess instruction in the schools can be presented. These insights lead to certain recommendations for chess training in the schools.

One, chess teachers should use physical pieces (e.g., larger plastic pieces) and chessboards (e.g., vinyl chessboards) that can handle physical abuse, because school-aged students may throw the pieces about a classroom or drop the chessboards on the classroom floor. This mistreatment of chess equipment is likely among middle-school students (grades 6-8) when students are overly active and have difficulty at self-control. After students begin to learn how to play chess, they tend to act more responsibly toward chess equipment.

Two, chess teachers should present simple endgame problems such as finding a checkmate with a King and two Rooks vs a King. School-aged students should master simple endgame problems prior to studying opening theory and middle game principles. With simple endgame problems, school-aged students begin to develop a deep understanding of what individual pieces can do and how best to coordinate their movements. Studying entire game positions with 32 pieces on the board can likely be overwhelming for novice

students who lack an understanding of how chess pieces move and accomplish goals in a coordinated manner.

Three, chess teachers instructing school-aged students should seriously consider following the Cuban approach to chess training as presented in the masterpiece Chess Fundamentals by JOSÉ RAÚL CAPABLANCA (1994). In the Cuban approach, the study of simple endgame problems precedes the study of chess openings and middle game tactics. With the Cuban approach of Capablanca, one proceeds from the simple to the complex.

Four, chess should be taught slowly to give school-aged students time to understand key concepts, principles, and at times subtleties of chess. What is obvious to an experienced chess teacher will likely often not be apparent to a novice student. The chess teacher needs to help novice students focus on and understand basic and salient relationships in chess positions and this may require additional time and multiple examples.

Five, chess teachers should introduce and use chess technology (e.g., chess-

related websites) where and when appropriate. Many school classrooms have computers, projectors, and screens that permit the presentation of websites to students and many of those websites could and should be chess-related such as chess.com. There are tremendous resources on the Internet available for chess instruction, chess learning, and chess playing.

Six, there should be efforts to establish a national network of electronic chess matches between teams of school-aged students from different schools within a country (e.g., Canada or Chile). With such matches, opposing teams should be at similar grade levels and have similar years of chess experience.

Seven, there should also be efforts to establish an international network of electronic chess matches between teams of school-aged students from different schools in different countries (e.g., U.S.A. team vs Colombia team). Opposing teams should have similar years of education and chess experience. International chess matches involving school-aged students may likely contribute to better understanding of students from different cultures and countries. Also, the students will likely really enjoy the match experiences.

In addition to those seven recommendations for chess instruction for school-aged students, four recommendations are presented to improve chess training programs in the schools. One, an evaluation component should be an integral part of each chess training program (if possible) to determine the cognitive, educational, and psychological effects of chess training. Two, teaching practices in chess training programs should be reviewed and evaluated to identify best practices in teaching chess to school-aged children. Three, chess technology (chess-related websites and chess software) should be introduced where and when appropriate in chess training programs. Four, there should be investigations of the cognitive and educational effects of adding chess technology to chess training programs.

Regarding students with disabilities, chess training can be useful. BART (2020) reviewed research on the effects of chess training on students with disabilities. That research indicated that chess training has positive educational effects on students with disabilities.

Certain recommendations are presented to promote chess training for students with disabilities. One, there should be research to determine how to match chess training procedures to disabilities. Based on BART (2020) and personal experiences with students with disabilities, it is evident that chess training methods used with regular students need to be modified when teaching chess to students with disabilities. For example, when teaching chess to students with severe visual limitations, it is very helpful to provide students with chess boards and chess pieces that allow the students to identify physically different chess pieces and the squares on the board where the pieces are. Two, there should be efforts to prepare and publish articles and books to explain which chess training programs are best suited to students with different disabilities.

3 CHESS TRAINING IN THE COLLEGES AND UNIVERSITIES

Colleges and universities constitute a fertile ground for chess training. BART (2021a) discussed his research on teaching chess to university students.

He used chess technology in a chess training course. The students enjoyed the course and the chess technology. They especially enjoyed playing as teams in class games.

BART used various chess-related websites in the instruction. To aid in the teaching the basic rules of chess, he used a website of the UNITED STATES CHESS FEDERATION (2021) termed “Learn to play chess”. To discuss and analyze chess positions, he used the website of CHESS.COM (2021a) and its analysis board (CHESS.COM, 2021b).

He also used the website of LICHESS.ORG (2021a), and its board editor (LICHESS.ORG, 2021b). To present and review classic chess games, he used the website of CHESSGAMES.COM (2021). For example, he used that website to present and discuss the classic Opera game between Paul Morphy and the pair, Duke Karl and Count Isouard (CHESSGAMES.COM, 2021b). Use of these free websites was very helpful in the teaching of chess to undergraduates in a large university and could be very useful in the teaching of chess in other colleges and universities.

Based upon his experiences teaching chess to university undergraduates, certain recommendations are offered. One, establish a national network of electronic chess matches between teams of college students from different schools within a country (e.g., Canada or Chile). Two, establish an international network of electronic chess matches between teams of college students from different schools in different countries (e.g., U.S.A. university team vs Colombia university team).

Additional recommendations related to the scientific study of chess are presented. One, prepare reviews of chess research associated with chess training with university students. Two, investigate the long-term effects of chess training with university students. Three, investigate the transfer effects of chess training with university students.

4 CHESS TRAINING FOR SENIORS

Chess training may have substantial utility in caring for older people. Chess training may prevent the onset of Alzheimer's Disease and other forms of dementia. Also, chess training may help to maintain cognitive vitality among seniors. WILSON, SCHERR, SCHNEIDER, TANG, and BENNETT (2007) reported on research of the American Academy of Neurology that advised the use of chess with seniors. They and other researchers studying dementia found that older persons who were cognitively active were less likely to develop dementia than individuals who were not cognitively active. Senior citizens who study and play chess are certainly cognitively active.

BART (2021b) reported on his experience in teaching chess to seniors. He found that seniors tended to prefer being in groups when learning and playing chess. The seniors enjoyed playing as a group against an artificial opponent such as level 1 or level 2 on chess.com. The seniors would take turns making a move with other seniors offering advice to the senior making the move. The instructor would enter the move into a computer and display the move on either a physical chessboard or a computer-connected display screen.

BART found that the seniors whom he taught chess differed from undergraduates whom he taught chess in two ways. One, seniors were neither as competitive nor as quick to learn. BART had to proceed at a slower rate with seniors. Two, the seniors seemed timid and afraid to make mistakes.

Three, group-based chess training seemed to be most appropriate with seniors. If the seniors defeated an artificial opponent playing both White and then Black, the seniors would then play an artificial opponent at the next level on CHESS.COM. Care was taken to have the artificial opponent be at a chess skill level that was similar to the chess skill level of the seniors. The seniors enjoyed playing chess as a group.

Based upon those experiences with seniors, certain recommendations are presented regarding chess training for seniors. One, use physical pieces and boards along with chess technology in teaching chess. Two, make chess

training a fun, social event. Three, celebrate and discuss good moves. Three, have senior groups play against appropriate artificial chess players.

Certain questions are worthy of further investigation. One, to what extent does chess training prevent the onset of dementia among seniors? Two, how can chess training for seniors utilize the social orientation of many seniors?

5 CHESS TRAINING FOR MENTAL HEALTH

As a result of the Covid–19 pandemic and other factors, there are many individuals afflicted with clinical problems associated with depression, anxiety, and loneliness. Chess training may prove to be extremely useful in helping individuals afflicted with mental health problems. In that regard, certain recommendations are presented. One, consider using the ideas of FERNANDO MORENO (2001) on counseling as presented in his book *Teaching Life Skills through Chess: A Guide for Educators and Counselors*. Two, make use of research on chess training as chess therapy (e.g., ROMANOVA, et al. 2018) when designing chess training programs for seniors with clinical problems. Three, investigate the effects of chess-based therapy on individuals with clinical problems.

6 CHESS TRAINING IN CORRECTIONAL FACILITIES

Individuals in correctional settings can have problems with impulse control, lack of rationality, and poor decision making. Chess training may assist the incarcerated with cognitive problems associated with criminal behavior. For example, some incarcerated individuals may be impulsive with a tendency to be aggressive with other people without any consideration of the consequences of their actions. Chess promotes reflection and carefulness, because chess players can readily lose pieces and even games when they do not carefully evaluate chess positions resulting from various possible moves.

THE CHESS FEDERATION OF GREAT BRITAIN Chess has implemented a program entitled “Chess in Prisons” since 2014 and with much

reported success. The program manager CARL PORTMAN presented a persuasive argument in his book *Chess in Prisons* that chess can play a vital role in prisoner rehabilitation (PORTMAN, 2017).

Certain recommendations are presented that relate to chess training in correctional facilities. One, have any chess training in a correctional facility be carefully supervised to ensure trainer and inmate participant safety. Two, communicate with other chess training programs in correctional facilities for ideas. For example, the chess training program operated by Sheriff Tom Dart in the Cook County Jail in the City of Chicago has a chess team that placed 2nd in an international chess tournament (Fox 32 Digital Staff, 2021). Three, plan and implement matches between inmates from different correctional facilities.

7 FINAL CONSIDERATIONS

Chess training should not merely be for children in schools or for professional chess players. It has applicability for many segments of the community, including schools (grades K-12), colleges and universities (grades 13-higher), senior communities, clinical groups, and correctional facilities. In fact, chess training may have utility in all segments of the community. Only systematic scientific inquiry will inform us as to how useful chess training is in the various segments of the community.

To investigate the utility of chess training in the various sectors of the community, certain measures are warranted. One, there is a need for international and intranational collaborative studies. For example, chess training may be implemented in prisons in a South American country such as Peru and the data of the chess training may be analyzed in the U.S.A. Collaboration among chess researchers in different locations would facilitate research on the utility of chess training. Such collaborative research studies should result in research reports that should be submitted to academic journals and book publishers for possible publication and dissemination to interested parties and relevant organizations such as governmental agencies and non-profit funding

foundations. In this way, the scientific basis for the study of the utility of chess training in society is strengthened.

Two, there is a need for greater use of chess-related technology in the study of the utility of chess training in various sectors in the community. The availability of chess teachers varies among locales. In some locations, there are many chess teachers; in other locations, there are very few chess teachers. Chess-related technology such as the various useful chess-related websites available on the Internet can complement and supplement the chess training available in various locations where chess teachers are uncommon.

With increases in collaboration among chess researchers and in the judicious usage of chess-related technology, the study of the utility of chess training in various sectors of the community can progress at a rapid pace. It will be desirable that such inquiry leads to more reports published in academic journals and books. Such academic publications will strengthen the scientific basis for chess training as a vital educational and psychological intervention and likely enhance its usage as contributing to human welfare in various sectors of the community.

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