



M.I. Ayuntamiento de Xàbia
Concejalía de Deportes y Educación



PROYECTO EDUCATIVO AJEDREZ CENTROS EDUCATIVOS XÀBIA

Escuela Municipal Ajedrez (EMA)

Proyecto Educativo Ajedrez

ÍNDICE

1. Justificación
2. Objetivos Generales
3. Calendario Aplicación
4. Metodología
 1. Actividades tipo
 2. Actividades extraescolares

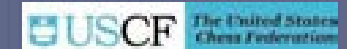


1. JUSTIFICACIÓN



- Contribuye a un desarrollo integral del niño@.
- Posee evidencias científicas.
- El ajedrez forma parte del curriculum en las escuelas públicas en más de 30 países. (Robert C. Ferguson web page)
- Utilización de un método científico:
 - Parte de unas reglas básicas (Leyes del ajedrez).
 - Permiten profundizar en la observación de la realidad.
 - Búsqueda de regularidades (ventajas, desventajas, éxito, errores...)
 - Para ello > emisión HIPÓTESIS y su contraste.

Evidencias científicas I



- In a 1973-74 Zaire study conducted by Dr. Albert Frank, employing 92 students, age 1.6-18, the chess-playing experimental group showed a significant advancement in spatial, numerical and administrative-directional abilities, along with verbal aptitudes, compared to the control group. The improvements held true regardless of the final chess skill level attained. [\[1\]](#), [\[2\]](#), [\[3\]](#)
- In a 1974-1976 Belgium study, a chess-playing experimental group of fifth graders experienced a statistically significant gain in cognitive development over a control group. When given tests for cognitive development, the chess group outperformed the control group significantly better in their [\[4\]](#)
- **3. In a 1977-1979 study at the Chinese University in Hong Kong by Dr. Yee Wang Fung, chess players showed a 15% improvement in math and science test scores. [\[5\]](#)**
- A four-year study (1979-1983) in Pennsylvania found that the chess-playing experimental group consistently outperformed the control groups engaged in other thinking development programs, using measurements from the Watson-Glaser Critical Thinking Appraisal and the Torrance Tests of Creative Thinking. [\[6\]](#), [\[7\]](#), [\[8\]](#), [\[9\]](#), [\[10\]](#), [\[11\]](#)
- The 1979-1983 Venezuela "Learning to Think Project," which trained 100,000 teachers to teach thinking skills and involved a sample of 4,266 second grade students, reached a general conclusion that chess, methodologically taught, is an incentive system sufficient to accelerate the increase of IQ in elementary age children of both sexes at all socio-economic levels. [\[12\]](#), [\[13\]](#), [\[14\]](#), [\[15\]](#)
- During his governor's teacher grant from the New Jersey State Department of Education, William Levy found that chess consistently (1980-1987) promoted self-esteem after a year of exposure. Many students' self-images improved dramatically. [\[16\]](#), [\[17\]](#)
- According to a two-year study conducted in Kishinev under the supervision of N.F. Talisina, grades for young students taking part in the chess experiment increased in all subjects. Teachers noted improvement in memory, better organizational skills, and for many increased fantasy and imagination (Education Ministry of the Moldavian Republic, 1985). [\[18\]](#), [\[19\]](#)
- In his 1986 pilot study, Dr. Ferguson found that it is possible to enhance achievement by focusing on individuals' modality strengths, creating an individualized thinking plan, analyzing and reflecting upon one's own problem solving processes, sharing his/her thinking system with peers, and modifying the system to integrate other modalities. [\[20\]](#), [\[21\]](#), [\[22\]](#)
- During the 1987-88 "Development of Reasoning and Memory through Chess," all students in a rural Pennsylvania sixth grade self-contained classroom were required to participate in chess lessons and play games. None of the pupils had previously played chess. The pupils significantly improved in both memory and verbal reasoning. The effect of the magnitude of the results is strong (eta 2 is .715 for the Memory test gain compared to the Norm). These results suggest that transfer of the skills fostered through the chess curriculum did occur. [\[23\]](#), [\[24\]](#), [\[25\]](#)

Evidencias científicas II



A 1989-92 New Brunswick, Canada study, using 437 fifth graders split into three groups, experimenting with the addition of chess to the math curriculum, found increased gains in math problem-solving and comprehension proportionate to the amount of chess in the curriculum. [14]

A 1990-92 study using a sub-set of the New York City Schools Chess Program produced statistically significant results concluding that chess participation enhances reading performance. [15], [16], [17]

15. In a 1994-97 Texas study, regular (non-honors) elementary students who participated in a school chess club showed twice the improvement of non-chess players in Reading and Mathematics between third and fifth grades on the Texas Assessment of Academic Skills. [18], [20]

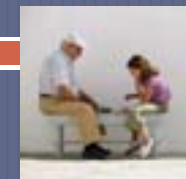
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Researchers and educators have questioned what causes this growth. The Venezuelan study claimed: "Chess develops a new form of thinking, and this exercise is what contributes to increase the intelligence quotient." [19] More recent researchers speculate that it is the growth of new synaptic connections. Chess promotes the growth of dendrites!

Why does chess have this impact? Briefly, there appear to be at least seven significant factors: 1) Chess accommodates all modality strengths. 2) Chess provides a far greater quantity of problems for practice. 3) Chess offers immediate punishments and rewards for problem solving. 4) Chess creates a pattern or thinking system that, when used faithfully, breeds success. The chess playing students had become accustomed to looking for more and different alternatives, which resulted in higher scores in fluency and originality. 5) Competition. Competition fosters interest, promotes mental alertness, challenges all students, and elicits the highest levels of achievement (Stephan, 1988). 6) A learning environment organized around games has a positive affect on students' attitudes toward learning. This effective dimension acts as a facilitator of cognitive achievement. (Allen & Main, 1976). [21]

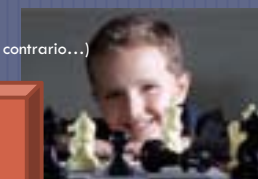
Instructional gaming is one of the most motivational tools in the good teacher's repertoire. Children love games. Chess motivates them to become willing problem solvers and spend hours quietly immersed in logical thinking. These same young people often cannot sit still for fifteen minutes in the traditional classroom. 7) Chess supplies a variety and quality of problems. As Langen (1992) states: "The problems that arise in the 70-90 positions of the average chess game are, moreover, new. Contexts are familiar, themes repeat, but game positions never do. This makes chess good grist for the problem-solving mill."

¿Por qué deberíamos jugar al ajedrez? ¿cuáles son los beneficios?



- Se puede jugar a cualquier edad
- Desarrolla la memoria
- Mejora la capacidad de concentración y atención
- Promueve la imaginación y creatividad
- Enseña a ser más autónomos e independientes (toma de decisiones)
- Desarrolla la capacidad de predecir y prever acciones consecuentes (pensar antes de actuar)
- Inspira la automotivación y autosuperación (a buscar la mejor solución/ jugada)
- Demuestra que el éxito se consigue con un trabajo perseverante y constante.
- Utiliza el un método científico.
- Relacionado con las matemáticas, informática,...
- Búsqueda y documentación (bibliografía, pag. Web,...)
- Relación con el arte (creatividad e imaginación, posibilidades en 64 casillas, posiciones ideales, estructuras de los peones,...)
- Relación con la psicología (autocontrol, paciencia, presión...)
- Torneos de ajedrez con variadas categorías para tod@s
- Potencia los valores (respeto, aceptación reglas, cooperación, valoración del contrario...)
- A los niños les encanta aprender jugando.

INCREMENTO DEL RENDIMIENTO ESCOLAR
DISMINUCIÓN DEL FRACASO ESCOLAR
DISMINUYE LA CONFLICTIVIDAD



2. OBJETIVOS GENERALES



- Desarrollar una **programación curricular vertical** (de 1º de primaria a 2º bachillerato) de **ajedrez** relacionada con los contenidos del resto de áreas de Primaria centrándose en las actitudes, valores y normas.
- Plantear un proyecto de **integración de contenidos ajedrecísticos al Proyecto Curricular de Centro** planteando un enfoque más original y diferenciador.
- Innovar en **educación en valores y convivencia** en los centros educativos utilizando el **ajedrez como herramienta metodológica**.
- Difundir el ajedrez en las escuelas** mediante su práctica en horario escolar y extraescolar.
- Desarrollar en los alumn@s cualidades como la atención, la concentración, la memoria visual, el pensamiento lógico, y como consecuencia de todo ello, **mejorar el rendimiento escolar**.
- Elaborar y desarrollar estrategias personales de concentración**, intentando mejorarla tanto en duración como en intensidad.

Objetivos Generales

- Valorar y potenciar la **creatividad y el razonamiento lógico** como estrategias fundamentales en la **resolución de problemas**.
- Mejorar el aumento de la **autoestima**, el **interés por el trabajo**, la **independencia**, etc.
- Mejorar el autocontrol** aprendiendo a potenciar el control de emociones e impulsos, observando y analizando las consecuencias de sus decisiones.
- Conocer y valorar sus propias habilidades y aptitudes para solucionar tareas nuevas y **mejorar su nivel de conocimiento en cualquier disciplina**.
- Relacionarse con los demás, respetando reglas y turnos de acción, valorándolos como rivales y compañeros** y colaborando con ellos en la búsqueda de soluciones.
- Disminuir la conflictividad entre el alumnado**.
- Favorecer una mayor **integración** de centros educativos y de la comunidad docente por medio del ajedrez.

3. CALENDARIO APLICACIÓN

De OCTUBRE A MAYO (8 meses)

Ciclos	Cursos	Horas	TOTAL H.
1ª Primaria	1º y 2º	1 hora semanal	32 h
2º y 3º Primaria	3º, 4º, 5º y 6º	2 horas a la semana	64 h
1º y 2º Secundaria	1º, 2º, 3º y 4º		
Bachillerato	1º y 2º	1 hora a la semana (+ extracurricular club)	32 h



4. METODOLOGÍA

- Basada en la **teoría constructivista** y promoviendo el **aprendizaje significativo** y el **aprendizaje por descubrimiento**.
- El protagonista en el aula es el **alumn@**
- Agrupamientos de alumn@s flexibles
 - Individuales.
 - Por parejas.
 - Grupos reducidos.
 - Toda la clase (gran grupo)



5. ACTIVIDADES TIPO



Programas informáticos



On line



XECBALL, ajedrez en movimiento





**Muchas gracias
por su atención**

