



CHIRON A.I.

BUSINESS PLAN

**Gies School of Business,
University of Illinois
Urbana-Champaign**

- Chris Acosta
- Hamid Atighechi
- Ross David Johnson
- Dami Oladapo
- Rachel Vargas Robison
- Joseph W. Sturino



Executive Summary:

Chiron A.I. is at the forefront of changing education through the use and development of A.I. technology tailored to children's unique learning needs.

Mission

Our mission is to empower underserved and special needs children and families with personalized learning experiences and resources through A.I. that caters to their needs. This personalization enables those students and families to reach their full potential and achieve academic success.

Vision

Our vision is to give more opportunities to a demographic missing in society's view. Chiron A.I. will focus on implementing the product into high-needs schools that receive Title 1 funding, which is Federal education assistance program for low-income families. Chiron A.I. will be a resource for all underserved children and families to assist with completing their K-12 education and prepare them for their post-secondary education plans.



Business Description

Chiron A.I. is an A.I.-powered education platform that aims to revolutionize personalized learning by prioritizing high-quality, customized instruction for special needs students and those from disadvantaged backgrounds. The platform leverages cutting-edge A.I. technologies, such as large language models, machine learning, natural language processing, and machine translation, to create tailored learning experiences based on each student's unique profile.

Chiron A.I. offers targeted tools like text-to-speech and A.I. tutoring with feedback tailored to personal learning requirements, making it particularly helpful for the 17% of U.S. children with ADHD, dyslexia, and autism spectrum disorder (Increase in Developmental Disabilities Among Children in the U.S., 2021). Early diagnostic tools also assist in promptly identifying learning challenges so that the learning approach can be adapted and optimized for each situation (Tupper, n.d.).

The platform's multilingual capability, powered by machine translation, offers local, culturally appropriate content for global learners, improving access even in regions with limited resources. Dialogue agents provide A.I. tutoring in students' native languages, promoting self-paced learning in familiar contexts.

Inclusion is a cornerstone of the platform, which adheres to Universal Design for Learning (UDL) principles in partnership with CAST, ensuring usability for all learners (UDL: The UDL Guidelines, n.d.). It also employs equitable A.I. practices to prevent biases, aligning with the guidelines on "A.I. for Equity in Education." It draws on expertise from groups such as The Education Trust to foster equitable access (Kriha, 2024).

In a particular education software market poised for significant growth, this platform stands out with its bespoke A.I. approach, ensuring quality that resonates with children in this target segment and provides education in a way that resonates with them. Ongoing research and development in areas like multimodal learning aim to position the platform at the forefront of inclusive education technology. The A.I. education platform transforms personalized learning, prioritizing high-quality, customized instruction for special needs students and those from disadvantaged backgrounds.

- AI-powered platform revolutionizing personalized learning for special needs and disadvantaged students
- Leverages A.I. technologies to create tailored learning experiences based on each student's unique profile
- Offers targeted tools, multilingual capability, and A.I. tutoring in native languages
- Adheres to UDL principles and employs equitable A.I. practices to prevent biases
- Positioned in a growing market, stands out with a bespoke A.I. approach and ongoing R&D



Market Research

Market Research is based on our understanding of the US grade school system with the objective of assisting our students/clients throughout their K-12 careers.

Target Market Identification:

- Students from underserved communities
- Underrepresented groups
- Students with special needs

Market Needs:

- Personalization & flexibility in learning & mastering subjects
- Accessibility to AI assisted learning.
- Inclusivity of concepts & allegories familiar to the market audience.
- Supportive learning environment that is safe for children and their data.

Competitive Analysis:

- Existing solutions like Eduaide or Merlyn are focused on assisting teachers while students are in the classroom. Our product is an after-school product that reinforces the learning progress of the students. It is student focused.
- Market Gaps: The products that are akin to ours are still faced with algorithms bias, data privacy concerns. As of 2022, there were 75.2 million U.S students, with many vast of these students that fall under our target audience. Based on the competitor's history, we can estimate a market cap value of \$2-3 billion.
- Innovation & Differentiation: Unlike other products, this assistant helps to simplify understanding of the subjects learned by the students using familiar visual cues and learning guides that can help create opportunities and solutions for the students.



Product or Service

Summary

We propose an innovative AI-powered educational tool to bridge the achievement gap for underprivileged, underrepresented, and special needs children. As a personalized after-school tutor, Chiron A.I. leverages A.I. to create customized learning experiences. Teachers share student strengths, weaknesses, and specific learning goals. The A.I., equipped with voice interaction for accessibility, tailors its approach based on these inputs and adapts further through student interaction. This dynamic system ensures that each child receives the individualized support they need to thrive. We aim to democratize education by providing high-quality, personalized learning opportunities irrespective of background or learning style.

Customer Support

An A.I. generated avatar for basic questions.

Provide human support when needed or requested

Live tutor on call for education-based issues.

Software

A large language model specifically trained to interact with children based on the latest education research.

Machine learning

Natural language processing

Machine translation

Tailored learning experiences based on each student's unique profile.

Data Management

State-of-the-art cyber security to keep data private and prevent data breaches.

Meets the most up-to-date security compliances.

Chiron A.I. adheres to the most stringent data protection laws.

Interface


Text to Speech and Speech to text?

Speech visual and audio to Speech.

Self-Learning, Emotion A.I., which "gets to know" each student

Tailored Avatar

Multilingual, culturally sensitive



Marketing & Sales Plan

Our approach to marketing and sales centers around educating the marketplace and communicating our innovative offering to our key target audiences. The pillars of our marketing strategy aim to reach the following:

- Families of special needs children
- Educational institutions with special needs programs
- Underserved communities

Marketing Strategy

- Partnerships and Collaborations
- Partner with schools and educational institutions with dedicated special needs programs to demonstrate effectiveness and gain adoption.
- Work with community organizations to spread awareness and reach underprivileged students.

Online Marketing

- Establish content that articulates the value of our platform concisely. This content should include articles and case studies communicating tangible impact.
- Social Media awareness explicitly targets families with special needs

Events and Participation

- Attend and present at industry conferences focused on special education
- Work with local government to gain buy-in and spread awareness

Sales Strategy

- Pricing Structure tiered pricing to incentivize bulk purchases from schools and educational institutions
- Offer free trial periods to gain adoption before converting to paid license subscriptions

Sales Team & Customer Success

- Dedicated salesforce and critical account executives are responsible for each unique target market (Families, Institutions, & Communities)
- Leverage A.I. for customer onboarding and training
- Customer Success Team in place to support users

Sales Target

- 12-month revenue goal: \$750K



Funding Opportunities

Initial Funding Goals

Given the ambitious scope of the AI-powered education platform, Chiron, initial funding should cover product development, market analysis, pilot testing, and early-stage operations. A realistic initial funding goal ranges between \$2 million and \$10 million, which will facilitate the development of a robust prototype, conduct necessary research and development, and establish a foothold in the target market.

Investment Opportunities

- **Government Funding [seed funding]:** Secure initial funds through government grants or subsidies for technology and education innovation. Focus on programs that support special needs education, A.I. development, and educational equity. This provides a solid financial base and potentially reduces the equity needed to be relinquished.
- **Equity Financing [series A]:** Attract angel investors and venture capitalists interested in Edtech and A.I. This method can bring in significant funds but involves sharing company ownership. Consider this source of funding after gaining traction and a customer base to negotiate a smaller equity stake.
- **Crowdfunding [seed funding]:** Utilize platforms like Kickstarter or GoFundMe to raise awareness and funds, validate the product, and engage potential users.
- **Corporate Partnerships [series A]:** Establish partnerships with companies in the educational or technology sectors seeking innovation in AI-driven learning. These partnerships can offer both capital and strategic advantages. However, we should consider this funding source after gaining traction and a customer base to negotiate a smaller equity stake.

Seed Funding Stage

At the seed funding stage, focus on securing investments from government funds and angel investors and using a crowdfunding approach. Aim to raise between \$2 to \$4 million to refine the product concept, conduct market research, and build the prototype. Networking in tech and educational sectors, attending industry conferences, and engaging with startup incubators in San Francisco can connect us with potential investors.

Series A and Beyond

After demonstrating the platform's viability through successful pilot projects and gaining initial customer traction, we can move to Series A funding and beyond. More significant amounts of capital are needed at this stage, typically between \$4 million and \$20 million, to scale operations, expand the team, and enter new markets. Venture capital firms focusing on Edtech and A.I. will be critical targets during this phase.



References

Increase in developmental disabilities among children in the US. (2021, August 25).

Centers for Disease Control and Prevention.

<https://www.cdc.gov/ncbddd/developmentaldisabilities/features/increase-in-developmental-disabilities.html>

Kriha, N. (2024, March 6). *Navigating the promise and peril of AI for students of color - the Education Trust.* The Education Trust. <https://edtrust.org/resource/navigating-the-promise-and-peril-of-ai-for-students-of-color/>

Tupper, T. (n.d.). *Artificial Intelligence Enabled Personalized Assistive Tools to Enhance Education of Children with Neurodevelopmental Disorders / Review.* Pressbooks.

<https://utsa.pressbooks.pub/researchtrendsldt/chapter/artificial-intelligence-enabled-personalized-assistive-tools-to-enhance-education-of-children-with-neurodevelopmental-disorders-a-review/>

UDL: The UDL guidelines. (n.d.). <https://udlguidelines.cast.org/>

US Census Bureau. (2023, October 11). The Census Bureau released new data showing the highest school enrollment count in years. Census.gov.

<https://www.census.gov/newsroom/press-releases/2023/highest-school-enrollment-count.html>