AGENDA ITEM: NEW CHARTER APPLICATION – SySTEM SCHOOLS

SySTEM Schools submitted a complete new charter application package to serve grades 6-12 for the Board's consideration. The preliminary application package meets the minimum scoring requirements set by the Board for the 2014-2015 application cycle.

REPORT SUMMARY

Applicant Name: SySTEM Schools

Authorized Representative Name: Angelica Cruz

Proposed School Name: SySTEM Phoenix

Proposed School Location: Near 1st Street and Washington Street in Phoenix

Mission Statement

Through integrated learning environments immersed in Science, Technology, Engineering, and Math (STEM), SySTEM Phoenix will prepare students to become the innovative leaders of tomorrow.

Target Population

SySTEM Phoenix will serve the residents of downtown Phoenix, including residents of the Phoenix and Wilson Elementary School Districts and the Phoenix Union High School District.

Student Count

Year	Grades Served	# of Students
1	6	125
2	6-7	225
3	6-8	325

School Calendar
Standard, 182 days

Target Start Date
August 04, 2014

Application Package Scoring

	Preliminary TRP Scores		Revised TRP Scores	
Any **Falls Below the Expectations** ratings?	No		n/a	
Any section in which more than one evaluation area scored **Approaches**?	No		n/a	
		Percent Meets		Percent Meets
Educational Plan Score ≥ 95% Meet standard?	Yes	99%	n/a	n/a
Operational Plan Score ≥ 95% Meet standard?	Yes	100%	n/a	n/a
Business Plan Score ≥ 95% Meet standard?	Yes	100%	n/a	n/a

The TRP provided the applicant with written technical assistance based on its review of the preliminary written application package prior to the in-person interview.

In-Person Interview Summary

During the in-person interview the applicant responded to the questions regarding the submitted (Educational, Operational, Business) Plan.

The Applicant was represented at the in-person interview by all three corporate principals, including two staff members and a member of the board; collectively, they were able to clearly answer TRP questions across all areas of the application package. The Applicant noted the importance of "citizens being proficient in STEM" and intent of SySTEM Phoenix to graduate students "ready to excel in STEM fields." A clear description of ways in which the STEM program will play a significant role in the education of students supported the necessity for deep learning to occur through the integration of subjects that "mutually reinforce one another."

The Applicant demonstrated understanding of the students that are likely to enroll. For example, to provide engagement opportunities for working families who might be constrained from becoming involved in their children's education, the Applicant identified an online data management system for parents, specific conferences, quarterly meetings regarding STEM education, and immediate conferencing for any student "showing level one in the five essential learning outcomes." Further, responding to a question regarding the value of the extended school day and year, the Applicant expressed recognition that students will arrive with learning gaps and the Common Core does not loop the standards; this "equates to the necessity of additional time."

The independence of summative assessments was the only area within the application package scored as approaching the criteria. The Applicant clarified that in "problem based learning there is a lot of group work," however, "the summative assessment projects are individually completed." The Applicant further described the STEM in Action Block and utilizing student research to determine what interests them in order to motivate and create opportunities for "long, deep learning." Additionally, the Applicant was able to provide concrete examples of how students are involved in the learning process, for example: "at the beginning of every unit the teacher would introduce the essential learning outcomes then together with the students create the success criteria."

The Applicant also adequately addressed questions related to the governing board's size and necessary skill sets. The Applicant indicated an "ideal" board size of nine members, representing "a wide variety of areas from real estate to law to STEM" as well as the importance of diversity.

The TRP's questions related to the business plan were satisfactorily answered. The Applicant indicated the usage of guidelines provided by the Arizona Charter Schools Association and budgeting "conservatively" in determining a 50 square foot per student assumption. They pointed out the conservative nature of their budgeting and allowance within the budget to afford more square footage if necessary.

The Applicant was asked to expand on ways in which the continuing growth of the school's leadership would occur. Responses indicated clear understanding of the importance of ongoing professional development in the STEM fields and for leadership to continue "working closely with the industry to know what is changing and developing." The strategies included technology seminars at Arizona State University, school site visits, and participation in the Arizona K12 Center.

Qualitative Analysis Summary

The TRP recommends approval of the application for SySTEM Phoenix as the application meets scoring criteria and the Applicant clearly demonstrates the capacity to open and operate the school as presented.

Within the Educational Plan, strengths were noted regarding the Educational Philosophy and clear rationale supporting the necessity of a STEM school for the target population. The SySTEM Phoenix Program of Instruction succeeded in portraying an integrated approach to the delivery of curriculum. A comprehensive program of assessment demonstrated how the key components of the instructional program work together providing a solid STEM educational program.

Strengths within the SySTEM Phoenix Operating Plan included the presentation of school governing body responsibilities and the descriptions of school governing body roles. Management roles and responsibilities were presented with in the areas of instruction, curriculum and assessment, staff development, financial management, contracted services, personnel, grants management, and student accountability. The proposed staff is adequately qualified, including chief operations officer, Angelica Cruz, a Teach For America alumna as well as Rodel Aspiring Principal and Aspiring Leaders Fellow. Nicole Fernandez, the proposed chief academic officer, is Teach For America alumna, has completed a Masters in Educational Administration at Arizona State University, and is a National Board Certified Teacher.

The Business Plan presented a viable plan regarding facility acquisition and the need to grow the physical footprint over three years from 5,000 to 12,701 square feet. Adequate detail is provided regarding the division of this square footage and necessary room requirements including larger classrooms utilized for problem-based learning and collaborative group work.

The Applicant presented an initial enrollment target of 100 sixth grade students and a five pronged approach to marketing, which is detailed with specific strategies and associated costs that are in alignment with the Start-up Budget.

The proposed staffing-plan for year one consists of four classroom teachers, one special education teacher, the two administrative staff, and one support staff member. Notably, the Applicant identifies community and STEM partnerships to supplement conservative staffing including the Arizona Technology Council, TGEN, and Intel.

The proposed Start-up Budget includes a secured Arizona Charter Schools Program Grant of $230,000 deployed for administrative and support personnel as well as marketing, advertising, staff recruitment, and facility acquisition. The Applicant based the proposed Three Year Operating Budget on 90 percent of the projected full enrollment and designed the budget to ensure a minimum three percent contingency/surplus each year.

During the interview, the Applicant satisfactorily addressed questions across all plan areas, clarifying and additional detail regarding a STEM education model and the importance of "training students to be the innovators of today and become the innovative leaders of tomorrow." Following the interview by it was the consensus of the TRP that the Applicant demonstrated evident preparation, the necessary due diligence, and competence to open and operate SySTEM Phoenix.

A. EDUCATIONAL PLAN

The following summary was created from excerpts and summaries of the documents submitted for the applicant's Educational Plan.

Plan Summary

SySTEM Phoenix's educational philosophy is rooted in four foundational beliefs related to the necessity of incorporating an authentic STEM curriculum into students' education. The SySTEM Phoenix educational model is built on utilization of problem-based learning aligned with Arizona's State and Common Core Standards. The curriculum will be broken down into scaffolded interdisciplinary units, constructed using the principles of Backwards Design, designating the standard as the end goal. Problem-based learning is coupled with cooperative learning strategies as well as Cognitive Coaching strategies to "help students think through their thinking." An additional piece of the educational model is the development of STEM Industry Partnerships to provide student internships, serve as mentors, and provide authentic feedback.

SySTEM will review student assessment data to revise and better align what teachers teach and what students learn. Teachers will assess students in a variety of ways including use of state standardized tests, 6-week benchmark assessments, unit tests, and daily exit tickets or check for understanding data points.

PMP

The Performance Management Plan (PMP) for new applicants is a continuous school improvement plan that ensures the Applicant is ready to implement systems for meeting the Board's academic performance expectations. The Applicant submitted a PMP that met the criteria in all areas for both Reading and Math. Details can be found in the attached Scoring Rubric (presented in the application portfolio: B. Scoring Results).

Curriculum Samples

Curriculum samples were provided for grades 6-12. The table below indicates which curriculum samples in the preliminary application package met all Board requirements (+), and which had deficiencies (-). Details can be found in the attached Scoring Rubric (presented in the application portfolio: B. Scoring Results).

Grade	Math	Reading	Writing	Science
6	-	+	+	
7	+	+	+	
8	+	+	+	+
9	+	+	+	+
10	+	+	+	
11	+	+	+	
12	+	+	+	

Educational Plan Findings

	Preliminary TRP Scores		Revised TRP Scores	
Educational Plan Score ≥ 95% Meet standard?	Yes	77 of 78	n/a	n/a
Number of "Falls Below" ratings	0		n/a	
Number of "Approaches" ratings	1		n/a	

Analysis of Educational Plan

The Educational Plan meets the standard for approval because it is comprehensive, well aligned, and designed with the target population in mind. SySTEM Phoenix researched the identified target population: "residents of the downtown Phoenix community, who exhibit some of the highest indicators of poverty and the lowest indicators of academic achievement in the city." The application package indicated that the program of instruction was designed to meet the needs of students in this target population and prepare them with the skills needed to pursue STEM careers.

The Educational Philosophy aligns with foundational beliefs regarding the importance of a STEM program including the necessity of STEM competencies, the need for the proposed target population to achieve in STEM fields, and the integration of meaningful educational experiences to deepen learning. The Program of Instruction and Performance Management Plan were clearly aligned with this philosophy. The Applicant indicated that "through authentic, hands-on educational experiences, all students will develop the academic and social skills necessary to compete in an increasingly STEM-based global workforce."

The SySTEM Program of Instruction presented an integrated approach to the delivery of curriculum including math/science and English/history common core integrated blocks, and a 'STEM in Action' block. These two areas are denoted as important to ensure coursework is connected within the subject areas as well as to the outside world. The Applicant identifies supplementary curriculum standards of STEM industry expectations, Next Generation Science Standards, and Partnership for 21st Century Skills to support the State and Common Core while integrating the STEM program. To meet the needs of students in need of special education and ELL services, the Applicant not only committed to providing these services in accordance with state and federal laws but also plans on "crafting personalized learning experiences" through differentiated instruction based on the key principles of Universal Design for Learning.

The students' formative assessment opportunities are presented as "fundamental and indigenous" to student learning. The summative assessments scale from benchmark assessments to specific accountability assessments. The SySTEM Phoenix Performance Management Plan was found to be in alignment with the Program of Instruction and ongoing review to ensure alignment is presented.

B. OPERATIONAL PLAN

The following summary was created from excerpts and summaries of the documents submitted for the applicant's Operational Plan.

Plan Summary

SySTEM Schools incorporated as a non-profit corporation with the Arizona Corporation Commission in 2012 as Advance Science Program and Innovative Research Education Incorporated. The incorporation was for the sole purpose of operating a STEM school in Central Phoenix. The proposed governing board and Corporate Entity are the same and have been established in accordance with statute for the purpose of providing educational services. The current governing board consists of three members.

The governing body SySTEM Phoenix will delegate all administrative responsibilities to the chief operations officer and chief academic officer. The chief operations officer oversees all duties related to systems and operations and the chief academic officer oversees all duties related to instruction. A staff of highly qualified individuals will be hired and contracts established with external service providers to help execute the day-to-day operations of the school.

The table below delineates the composition of the school governing body as described in the narrative:

School Governing Body Member Type	Name
Charter Organization	Angelica Cruz
Charter Organization	Nicole Fernandez
Charter Organization	Doris Roman

Principal Background Information

Authorized Representative and Principal: *Angelica Cruz*
Confirmed Education History: Master of Education in Educational Administration, Arizona State University, 2011
Confirmed Employment History: Chief Operations Officer, SySTEM Schools, May 2013-present; Business Operations Manager, Empower College Prep, May 2012-May 2013; Director of Assessment, Girls Leadership Academy of Arizona, October 2010-May 2012; Student Achievement Teacher, Creighton School District, July 2007-October 2010
Arizona FCC Expires: 03/11/2016
Current or Past Charter Affiliations[1]: None

Principal: *Nicole Fernandez*
Confirmed Education History: Master of Education in Educational Administration and Supervision, Arizona State University, May 2011
Confirmed Employment History: Chief Academic Officer, SySTEM Schools, May 2013-present; Technology Integration Specialist, Tucson Unified School District, July 2012-February 2013; Math Teacher, Phoenix Union School District, July 2007-May 2012
Arizona FCC Expires: 05/04/2015
Current or Past Charter Affiliations[1]: None

[1] *In this section, "Current or Past Charter Affiliations" refers to a leadership or decision-making role in an existing charter school operation, such as charter representative, charter principal, or school site leader.*

Principal: *Doris Roman*
Confirmed Education History: Bachelor of Arts in Business, Marymount Manhattan College, May 1984
Confirmed Employment History: Director of Operations, Empower College Prep, July 2013-present; Program Coordinator, Chicanos por la Causa, May 2012-February 2013; Program Coordinator, Communities in Schools, November 2006-May 2012; Student Affairs Liaison, Arizona State University, July 2000-March 2006
Arizona FCC Expires: 04/02/2014
Current or Past Charter Affiliations[1]: None

Operational Plan Findings

	Preliminary TRP Scores		Revised TRP Scores	
Operational Plan Score ≥ 95% Meet standard?	Yes	24 of 24	n/a	n/a
Number of "Falls Below" ratings	0		n/a	
Number of "Approaches" ratings	0		n/a	

Analysis of Operational Plan

The Operational Plan meets the standard for approval as expectations were met in all areas.

SySTEM Phoenix identifies the corporate board also acting as the governing board, and as a whole presents a viable plan and structure for governance. The presentation of governing board responsibilities focuses on five primary areas, specifically mission, financial oversight, legal and regulatory compliance, chief officer oversight, and school promotion and accountability. General practices are established for the governing board and descriptions of individual governing board roles are included. A committee structure including committees focusing on governance, finance, academics, and development is already developed. The governing board is proposed to have a minimum of three and maximum of 15 members. The vacancy and succession plan includes a procedure for the induction of new board members.

The application package presents a viable operations plan including a description of the responsibilities of each administrative role as well as an office manager, dean of students, and special education teacher. Management roles and responsibilities adequately cover the areas of instruction, curriculum and assessment, staff development, financial management, contracted services, personnel, grants management, and student accountability. The organizational structure outlined includes teachers with certification in dual content areas. The Applicant indicated having made initial inquiries to teachers with dual math and science certifications.

The applicant indicates the intent to "seek outside expertise in specific areas that require certification or qualification beyond the scope of SySTEM Phoenix's employees in order to ensure the school remains in compliance with all state and federal regulations and the best possible services are provided." The areas include special education services, food services, accounting services, payroll, maintenance, legal services, and technology. The Applicant presents adequate provider qualifications for each service and aligns the associated costs and necessary budget assumptions.

C. BUSINESS PLAN

The following summary was created from excerpts and summaries of the documents submitted for the applicant's Business Plan.

Plan Summary

The Applicant documented the available square footage necessary for the number of identified classrooms and support spaces required. The Applicant would like SySTEM Phoenix to be located in downtown Phoenix, but also has included within their search locations in the North and East areas of the city, but still within high-need areas

with low performing schools.

An advertising and recruitment campaign is presented with strategies geared toward the target population. The campaign includes a timeline for the implementation of specific marketing and recruitment strategies as well as projected assumptions.

Evidence that SySTEM Phoenix has been awarded the Federal Charter Schools Program Grant is provided with the available funds included in the prepared budgets. SySTEM Phoenix's budget is based on 90 percent of full enrollment and accounts for attrition each year. The three-year budget projections provide for a minimum three percent contingency/surplus.

Facility Information

Proposed School Name:	SySTEM Phoenix
Proposed Location:	Unconfirmed location: Central Phoenix, with options at 5060 N. 19th Avenue, 1500 E. Thomas Rd., and 801-814 N. 2nd Avenue.
Facilities Requirements:	The facility will consist of 5,000 sq. ft. with four classrooms in year 1, and grow to 12,700 sq. ft. with 12 classrooms by year 3.

Budget Summary

The applicant has secured an AZ CSP grant from the Arizona Department of Education for start-up purposes. The secured funds, in the amount of $230,000 per year for three years, as stated by the applicant, are available as confirmed by Arizona Department of Education Grants Management.

The table below presents a summary of the budgets by year:

	Startup Period	Year 1	Year 2	Year 3
Projected Full Enrollment:	N/A	100	200	300
# Students Budget Based On:	N/A	90 (90%)	180 (90%)	270 (90%)
Total Revenue:	$230,000.00	$907,106.33	$1,372,651.38	$2,146,437.38
Total Expenditures:	$118,192.67	$650,724.95	$876,609.00	$1,203,470.00
Ending Balance:	$111,807.33	$256,381.38	$496,042.38	$942,967.38

Business Plan Findings

	Preliminary TRP Scores		Revised TRP Scores	
Operational Plan Score ≥ 95% Meet standard?	Yes	31 of 31	n/a	n/a
Number of "Falls Below" ratings	0		n/a	
Number of "Approaches" ratings	0		n/a	

Analysis of Business Plan

The Business Plan meets the standard for approval as expectations were met in all areas and the Plan as presented, is viable and adequate. The Applicant provided sufficient detail regarding the facility acquisition process either through lease or purchase. Three potential facilities within the target area are identified and detailed rationale is provided for consideration of each including the ability for expansion and opportunity of

leasing to own. A timeline for facility acquisition includes specific monthly objectives through the opening of school.

The application package indicates that funds have been secured for the first two years ($230,000 in the start-up year, $115,000 in year one, and $115,000 in year two through the Arizona Charter School Program Grant), and "a portion of these funds can be used to cover facility expenses the month prior to the school's opening as the building will be used as office space, teacher training, and marketing purposes." The budget is strengthened by the fact that the availability of these grant dollars will allow state equalization funding to cover facility usage costs.

The Applicant presents enrollment targets as the basis of determining the marketing and recruitment needs and presents viable strategies for advertising and promotion. A fair and equitable enrollment process is described in detail. The Applicant indicates reducing marketing costs through donated services, for example, individuals with advertising and web design services currently being provided. With the Applicant's marketing timeframe is strengthened by specific enrollment benchmarks denoted for each identified set of strategies.

The SySTEM Phoenix staffing plan includes four classroom teachers in year one as well as one special education teacher, the two administrative staff, and one support staff member. The Applicant noted the "need for extensive nationwide recruitment geared toward STEM education," accordingly, a portion of the secured grant funds, has been allocated for this purpose. The hiring plan and selection criteria are rigorous and include a commitment to the school and students, proven record of success in the classroom, and expert knowledge. A thirteen step hiring process includes the screening of applicants through phone, in-person, and panel interviews. The Applicant's induction and training plans are divided into the three areas (school-wide, collaborative working groups, and individual), within each area a minimum of four strategies are included.

The proposed Start-Up Budget utilizing the secured Arizona Charter Schools Program Grant of $230,000 was well prepared with realistic projections for administrative and support personnel as well as marketing, advertising, staff recruitment, and facility acquisition. The Three Year Operating Budget is based on 90 percent of the projected full enrollment in each year and includes a minimum three percent contingency/surplus each year. The Three Year Operating includes $55,000 for the facility lease as well as $50,000 for facility improvements in the first year.

EVIDENCE OF CAPACITY

Applicant Summary

The table below describes the participation of the Applicant in the In-Person Interview:

Name	Role	Attended Interview?
Angelica Cruz	Corporate Principal/Proposed Chief Operations Officer	Yes
Nicole Fernandez	Corporate Principal/ Proposed Chief Academic Officer	Yes
Doris Roman	Corporate Principal/Board Secretary	Yes

Analysis of Applicant Capacity

The TRP finds that the Applicant has the range of knowledge, skills and experience needed to open and operate a high quality school, including as demonstrated through strong responses to interview questions across all areas of the plan. The Applicant demonstrates a clear and unwavering commitment to the importance of "citizens being proficient in STEM."

The Applicant team was able to describe in detail a typical school day in the life of a 9th grade student at SySTEM Phoenix, this explanation was logically ordered and provided a wide range of instructional and mastery activities. Additionally, the Applicant did an excellent job of detailing specific avenues for parent involvement including online portals, conferencing, and parent education seminars.

The Applicant was able to provide a clear explanation of problem based learning and the utilization of group and independent assessments, as well as convincing assurances of multiple independent summative assessment opportunities. A sound response was provided to questions about the 'STEM Action' block, in which students learn how STEM concepts are incorporated in areas of interest. The rationale for this element was supported in an applicant statement: "we know that student interest and motivation are key factors in long term deep learning" and backed by research based evidence regarding hands-on experiential learning.

The Applicant demonstrated an understanding of student need and logical approach to increasing student performance in describing the rationale that extended time was a necessity given that students will have to close learning gaps and master Common Core Standards which are not annually spiraled.

Scenario questions related to under-enrollment and/or excessive student attrition and prioritizing budget cuts were posed. The Applicant relayed credible experience with similar scenarios and was able to immediately identify ways in which budget reductions would be made without directly impacting student instruction. Specifically, Angelica Cruz's experience with under enrollment was referenced, and the immediate implementation of "aggressive marketing" and initial cuts in the areas of supplies and technology, if necessary, were suggested.

BOARD OPTIONS

Option 1: The Board may approve the application package. Staff recommends the following language for consideration: Based upon review of the contents of the portfolio provided for this applicant and the information provided by the representatives of the applicant during consideration, and given it is within the sole discretion of the Board to approve or deny a charter, I move to approve the application package and grant a charter to SySTEM Schools to establish SySTEM Phoenix charter school to serve grades 6-12.

Option 2: The Board may deny the application package. The following language is provided for consideration: Based upon a review of the contents of the portfolio provided for this applicant and the information provided by the representatives of the applicant during consideration, and given it is within the sole discretion of the Board to approve or deny a charter, I move to reject the application package and deny the request for a charter of SySTEM Schools to establish a charter school for the reason(s) that its application failed to meet the requirements of Title 15, Chapter 1, Article 8 due to: (specific statement made by the Applicant during Board consideration).