

Durban, 6 October 2022

Dear Elizabeth,

Re: GG2240304: Mariannridge High School Mathematics Tutoring and Enrichment Project

Thank you for meeting with me on Wednesday, 21 September, to discuss the points you raised concerning our Global Grant proposal. During our discussion you explained that some of our proposals did not fit into the Rotary Global Grant rules but that it may be possible to obtain an exception to some of the rules given the character of our project. You asked me to write a letter with our proposals that you would escalate to management.

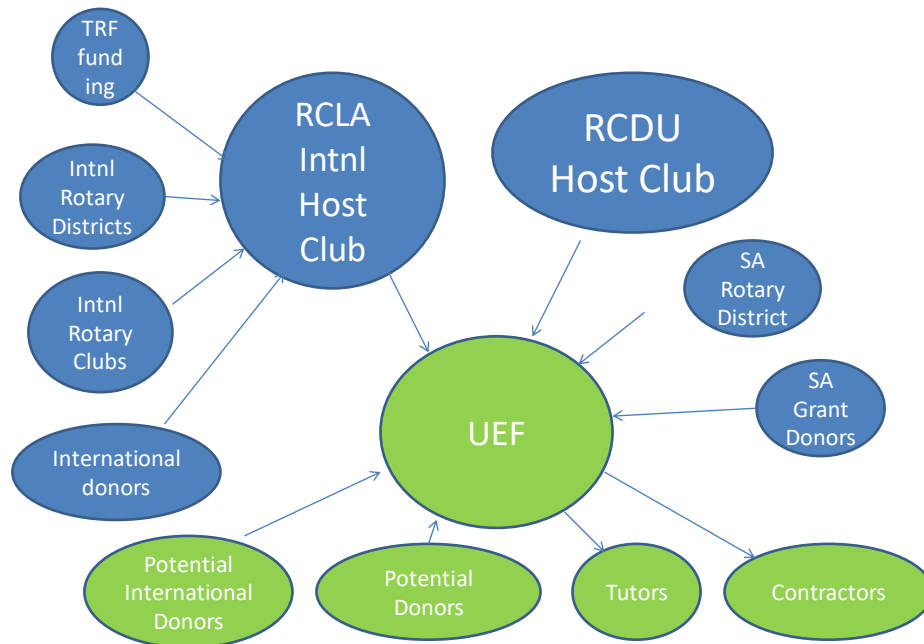
The following that points you raised, we believe, can be adjusted to adhere to the Rotary Global Grant rules:

1. Financial management could be reconsidered. This responsibility would be given to our International Host, the Rotary Club of Los Alamos (RCLA)- RCLA has an existing non-profit foundation, the Los Alamos Rotary 1312, Inc., which is prepared to manage the bank account and grant funds. A separate account under this foundation has already been established specifically for this project. The role of the Rotary Club of Durban Umhlatuzana (RCDU) would then be the practical administration, overseeing the continuing hands-on progress of the project. Further detail can be found in the Addendum 1.
2. Concerning conflicts of interest, the school, the Directors, and their employees will not be primary contacts, members of the grant committee, or signatories on the grant account. The tutors will not be primary contacts, members of the grant committee, or signatories on the grant account. These points will be stated concisely in the global grant application and as detailed in the Addendum 2.
3. A more detailed design of the project will be provided in the global grant application and as detailed in the Addendum 3.
4. The tutors and their training will also be addressed in greater detail in the global grant application and as detailed in the Addenda 4 and 5.

We believe that the above points can adhere to Rotary Global Grants rules, and clarifications may be found in the more detailed Addenda to this letter.

However, considering the sustainability of the project, specifically on the issue of future financing, we may need an exception to the rules. We request consideration of the revised plan we describe below. We give more details on how we foresee that this project will turn into an effort of unlimited duration sustained without the support of Rotary. There is doubtless some degree of risk involved, but as we shall explain, we believe that this risk is minimal, and the plan as well as the team assembled is well-suited toward making this kind of project a success, especially as the project has been up and running successfully for some time now.

The diagram below lays out the structure of the project. Bubbles in blue indicate those entities that are part of the Global Grant project and are mostly Rotary clubs and districts. Bubbles in green show the entities that are stand-alone and that we envisage taking control of the project once the Rotary Global Grant has established it. Once the Global Grant is completed, the blue bubbles disappear and the green bubbles represent the sustainable project management.



- **Financing.** How will this project continue to be financed after this grant has ended? Please work with the project stakeholders to provide a financial plan, which should include all annual expenses for the program (internet cost, computer lab maintenance, replacing math books, tutor salaries and transportation, etc.) and annual income with verified income sources. Please note that the project cannot rely upon Rotary or Rotary Club funding for ongoing operational costs after this grant has ended.
- **Maintenance.** Please provide an MOU signed by whichever cooperating organization will be providing ongoing maintenance for this project after the grant has ended.

Sustainability

The areas where we believe that more senior oversight is needed are fundraising, financial management and reporting, and relations with the school. B-BBEE¹ compliance involves a rather complex set of regulations. The Umhlatuzana Education Fund, NPC² (hereafter UEF) will be charged with these aspects of the project and will become independent of Rotary as required for project sustainability.

¹Under B-BBEE (Broad-Based Black Economic Empowerment), medium and large companies are rated on a scorecard in areas including Ownership, Management Control, Skills Development, Enterprise and Supplier Development, and Socio-Economic Development. Charitable contributions to projects whose beneficiaries are at least 75% Black South African, such as our project, earn points in the Socio-Economic Development category, helping to incentivize corporate giving in South Africa. A high B-BBEE is required to do business with the government, and there is a knock-on effect because companies are rated on whether they use suppliers with a high B-BBEE score.

²The Umhlatuzana Education Fund is a South African non-profit company (NPC) founded and registered in March 2022 with CIPC (Companies and Intellectual Property Commission). It is an NPC without members whose governing body is a board of five Directors, four of whom are Rotarians (3 from RCDU and 1 from the Pinetown Club). See <https://umhlatuzana-education-fund.org/> for more details. The registration and founding document are available at <https://umhlatuzana-education-fund.org/documents/>.

Our plan is to recruit more corporate donors, so that by 2025 the budget of the UEF will be fully funded by South African donations made directly to the UEF.

Our approximate costing is 150 000 ZAR per year per grade, so if we would limit ourselves to the programme at Mariannridge with the plan to serve five grades simultaneously, the annual need would be 750 000 ZAR. (See Addendum 6 for a budget justification for beyond the end of the Rotary involvement in the project.) We have already achieved 20% of this goal through the Atisa Securities gift. The UEF will produce a detailed annual report with externally audited accounts for 2022, which will document the success of the project and document our ability to meet the B-BBEE needs of prospective donors.

We believe that after having obtained the SARS PBO/Section 18a³ approval and having produced the UEF 2022 annual report, we will find ourselves in a very strong, almost ideal situation for recruiting additional corporate donors. We will have the UEF fully set up, and in addition to our proposal, we will have the results of the pilot project to prove the feasibility of our proposal. Moreover, our work with Atisa Securities and its B-BBEE consultant will have demonstrated that we can provide the B-BBEE Socio-Economic Development credits that many donors want. We will also approach South African charitable foundations and foundations in the US for recurrent support. The Los Alamos Club can receive donations for this project with its 501(c)(3) foundation for US donors.

We plan to mentor a selected subset of the older tutors to run the UEF with a view of them taking over at the end of the Rotary involvement. We have already taken concrete steps in this direction. The UEF Board of Directors has appointed Dr Sinenhlanhla Precious Sikhosana as Chief Operating Officer, and her primary responsibility will be to deal with relations with the tutors, and in particular organizing the tutors into a club, as described above.

In our experience the tutors have shown a remarkable degree of competence, maturity, and initiative during the pilot project, and we would like to devolve many of the responsibilities for the day-to-day running of the project to the tutors.

In the course of the pilot project, the volunteer tutors have further developed their leadership, management, and administrative skills. We have been particularly impressed with the maturity shown by the tutors and the initiative demonstrated. RCDU, as part of the intended secondary benefits of the tutorial project, has mentored these subsets of tutors with writing up proposals. This included the following:

- Statements of aims and objectives
- Assessment of needs of the recipients of their efforts
- Outline of their proposed project in terms of hours of tuition, venues, permission from the necessary authorities (school principals and parents)
- All resources required
- Evaluation strategies
- Budget of proposed expenditure
- Reporting responsibilities

³ SARS (South African Revenue Service) PBO (Public Benefit Organization)/Section 18A is essentially the South African equivalent of US IRS 501(c)(3) status. A non-profit company so registered is tax exempt and can issue Section 18A certificates to donors exempting their donations from South African taxation.

- Projected outcomes and strategies for potential continuation and follow up efforts

During the break between the first and second semester of the 2022 UKZN academic year, several tutors expressed the desire to provide tutoring over the university break to high school learners in their home towns. These tutors presented proposals to the RCDC, which provided funding for transportation and pedagogical materials for these efforts. The tutors involved demonstrated leadership skills that would make them natural leaders to be recruited when the UEF becomes self-sustaining.

In addition, in the past few months, RCDU has been training the tutors to manage the groupings of learners, and the distribution of tutors, development and distribution of study materials, recording of attendances, and general organizational skills that RCDU members usually undertook. This has been successful to date, and augurs well for our assessment that we would be able to delegate the running of this project to selected tutors who would co-opt others to assist and ensure continuity where indicated.

Four tutors reached out to four different schools during the July 2022 vacation, and also on a weekend during the September recess. They offered tuition to 45 learners at Bhaqalwesizwe High School (north of Durban near the border with Eswatini) over a three-week period, averaging four hours per day. This was followed by a weekend revision over 2 days averaging 7 hours per day. RCDU received a letter of acknowledgement and gratitude from the school principal Mr M.V. Mathenjwa. At the neighboring Prince Bhekintinta High School, 9 learners were tutored over 5 days for up to 5 hours. The initiative, proposal, planning, and execution of this project was undertaken entirely by tutors Londeka and Siyanda.

Another tutor Keiasha tutored 13 learners from grades 11 and 12 in the June effort, and will shortly tutor 60 learners from grades 9, 11, and Matrics at Glenover High school in Chatsworth (a township within Durban). Sihle and an additional tutor recruited by him tutored Maths and Physics at Bonela Secondary School in Bonela, Durban in July, reaching 31 learners. These tutors demonstrated leadership skills and initiative by conceptualizing, proposing, planning, and recruiting resources on their own. This was a learning exercise for them and illustrates the enthusiasm and leadership potential amongst the tutors, which will contribute to ensure the future management and sustainability of the project.

Tutors have been enthusiastic about undertaking these tasks, as the methods we have used in mentoring them have been participatory leadership development, in that we have allowed the tutors to identify challenges and offer solutions themselves.

We foresee that after the end of Rotary involvement the tutors will continue to be remunerated with a stipend for their services set at a rate slightly below the market rate for tutoring in the private market as provided in our proposal. However, those involved in the UEF, who will be older people, mostly in postdoctoral positions, will receive no remuneration.

Concerning identifying “verified income sources” for the continuation of the project beyond its end in 2025, we are unable to meet this high standard at this time, and if we did already have guaranteed corporate funding, we would not be seeking help for Rotary. Nevertheless, we think that the risk involved in this proposal is minimal, and we believe that we are well positioned to execute the plan in this proposal successfully.

Fundraising Prospects

Here we give a brief overview of the qualifications of the RCDU and current UEF Officers and Directors to successfully engage in further fundraising, so that by 2025 funding of the project completely independent of Rotary will be achieved.

The RDCU team includes senior academic leaders with strong ties to the South African research and technology sectors and others with strong ties to the business community in Durban and elsewhere in South Africa. Our goal is to achieve recurrent non-Rotary funding by the end of 2025, so that after that date the UEF will be well-established and the new leaders whom will mentor will be able to maintain the UEF and its programmes on an indefinite basis.

Two of the company officers and directors have extensive experience in university education and research.

- Thomas Konrad is presently academic leader of the Physics programme at the University of KwaZulu-Natal at the Westville campus (the main campus for pure science of UKZN, which is the flagship research university of the KwaZulu-Natal province) and has 20 years of experience in university teaching and research.
- Martin Bucher is CNRS Directeur de recherche based in Paris since 2004. Bucher also works part-time at UKZN and the University of Stellenbosch in the summers. Bucher was elected member of the Academy of Science of South Africa and shared the Gruber Prize in Cosmology as part of the the European Space Agency's Planck Mission team, which mapped the microwave remnants of the Big Bang. Before settling in France, Bucher was Stephen W Hawking Fellow of Mathematical Sciences and College Lecturer at the University of Cambridge, where he worked in the group of Stephen Hawking and delivered mathematics instruction to undergraduates at Trinity Hall, one of the colleges comprising the University of Cambridge. Bucher is presently part of the several radio astronomy experiments based in the South Africa, the UKZN-led HIRAX experiment and the University of Cambridge and Stellenbosch led REACH experiment. He has connections to the South African academic and research communities. Bucher also has some prior experience in fund raising. In 2019 he raised over 40 000 USD, mostly from private donors in the US, for the Future of Science Conference which brought postgraduate students from throughout the African Continent to Kigali, Rwanda, to hear lectures by world class scientists on a variety of topics of current interest. (<https://fosc.nexteinstein.org/>).
- Peggie Naidoo has connections to the business community in Durban and elsewhere in South Africa. Peggie Naidoo, audiologist and proprietor of PM Naidoo Associates, Speech Therapists and Audiologists (with 4 offices) has extensive contacts with the Durban business community that will be invaluable for this fundraising effort. It was Peggie Naidoo has introduced the project to Atisa Securities and secured their support.
- Richard Naidoo, PP RCDU and retired insurance broker has extensive connections and is exploring possibilities of funding through the Sibaya Community Trust.
- A Durban native, Dorina Bowes has worked in project and financial management at the School of Education at the University of Witwatersrand. She will help provide the necessary training in accounting and financial management to those who will take over the project. Having grown up near Mariannridge, Dorina Bowes has an extensive network of contacts in Mariannridge and the surrounding communities, which will be invaluable to ensuring community involvement and success of the project.

Conclusion

As the above explanations make clear, this project has been set up with a clear plan to take on its own life independent of Rotary after establishment. We recognize that this project may not fit into the box of a typical Rotary global grant project because it involves running rather than just supporting an educational project. However, we believe to have demonstrated that the team assembled includes the necessary expertise to make a project of this sort, which is so badly needed in South Africa, a success. This project has the potential to become a model for other similar projects.

We believe that this project entails minimal risk, and the pilot project almost guarantees success at some level. In weighing risk, we invite the Rotary Foundation to consider that even if the projected funding does not fully materialize, the project can be adjusted to run on a smaller scale, perhaps serving less grades than five grades at a time. In the other direction, it is also possible that with additional funding beyond that envisaged in the Global Grant proposal, the project could be expanded to more schools.

We presently have two other high schools near Mariannridge, Ndengezi Intermediate School and Dassenhoek High School whose principals would like our programme to be extended to their schools. Both schools have indicated their willingness to contribute resources to the project. The Dassenhoek principal has indicated that he is willing personally to be on site on Saturdays to assist. At Mariannridge we require that the school take charge of safety and discipline issues. From our point of view, active cooperation and interest of the schools is a pre-requisite to our involvement and the success of a project of this sort.

Presently, as we are awaiting our SARS PBO/Section 18a approval, we only have funds to continue until the end of the 2022 school year. (In South Africa the calendar and school years coincide.) We require either the Atisa funding, which will be released upon SARS PBO/Section 18a approval, or approval of this Global Grant in order to be able to restart the project at the beginning of the 2023 as our seed funding is running out.

We hope we have addressed all the points you presented in a satisfactory way. We appreciate the time you have taken to review our project and believe your analysis has been very helpful. Should you have more questions, please do not hesitate to request clarification. We would also be grateful for any suggestions how to adjust our proposal to remain within Rotary guidelines.

Thank you for your consideration.

Sincerely,

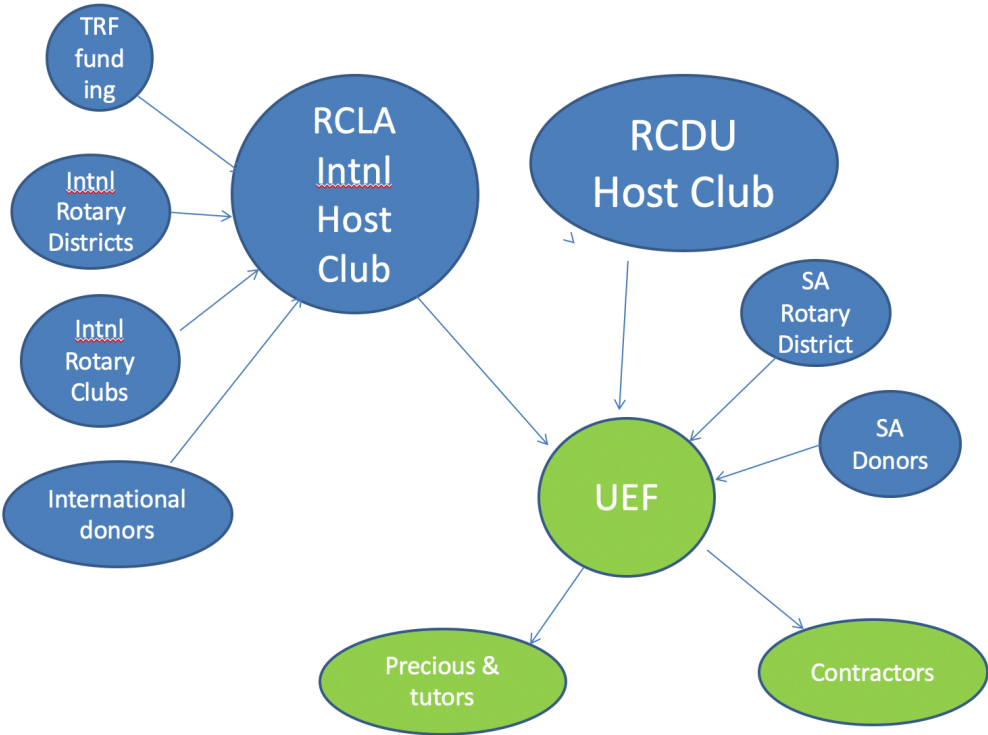


Martin Bucher
President, Rotary Club of Durban Umhlatuzana

Addendum 1: Banking

- **Bank account.** In my review, I noted that you are requesting to have your partnering organization, The Umhlatuzana Education Fund, manage the project bank account and grant funds. Regrettably, this is not allowed. Grants for club-sponsored projects need to be paid to a club or club foundation bank account. Please submit bank information for a club-controlled bank account. Please also note that it is Rotary’s expectation that the club sponsor will be in charge of all aspects of financial management.

We propose that the international host partner club, which is the Rotary Club of Los Alamos, manage the project bank account and grant funds as well as the grant reporting. They will work closely with the Rotarians at UEF, and release funding as the receipts become available. UEF will receive funding from SA sources and also track income and expenses.



List of funding and to which account it will be sent:

Rotary World funding:	RCLA acct
District 5520	RCLA Acct
RCLA	RCLA Acct
District 5340	RCLA Acct
International (not SA)	RCLA Acct
District 9370	UEF
RCDU	UEF
Rotary Pinetown	UEF
ATISA	UEF
SA donations	UEF

We prefer not to be in a position where it is necessary to send funds between countries just to have them returned when required for payments. Transferring money out of South Africa is not always simple because of rigid Exchange Controls⁴ in place. Therefore we propose that all funding received from SA sources be deposited into the UEF account and the RCLA is notified of all transactions including account statements. Additionally, the conditions of the Atisa Securities donation require that the funds from their donation be managed by the Umhlatuzana Education Fund.

As we hope that the UEF will become the future financing hub for this project (see the discussion of Sustainability in the main text of this letter), we would like all the spending on this project to be reflected in the audited accounts of the UEF, so that the history of the project is transparent and readily understandable to corporate donors. Consequently, we propose that all the expenditures be paid by the UEF to be reimbursed by RCLA.

The UEF is necessary because an NPC registered in South Africa with PBO status and Section 18a status from the South African Revenue Service (SARS) is required in order to receive South African corporate donations. Moreover, the accounts must be certified by a Registered Auditor licensed in South Africa. The UEF was also established in order to allow the community to take over the project after the Rotary Funding ends.

We hope that this overall plan is acceptable

⁴ <https://www.resbank.co.za/en/home/what-we-do/financial-surveillance/FinSurvFAQ>

Addendum 2: Conflict of Interest

Conflict of interest. No employees or members of the board of directors of the beneficiary school or the cooperating organizations can be either a primary contact, member of the grant committee of this grant or signatory on the project account. Please confirm that this is true or provide new grant committee members from your club not involved with the running of the school or cooperating organization that are willing to oversee the implementation of the activities of this grant and particularly assume responsibility for the financial disbursements and reporting on of this grant.

The School Directors and employees will not be primary contacts, members of the grant committee or signatories on the grant account. The tutors will not be primary contacts, members of the grant committee or signatories on the grant account.

The UEF founding document, its Memorandum of Incorporation, provides that the officers and directors may not receive remuneration for their contribution to the UEF. We believe that this is important to prevent the conflicts of interest that arise in many non-profits, where perpetuating staff salaries competes with delivering services in the most cost-effective manner. The role of the UEF will be limited to the following:

- Solicitation of donations,
- Financial management and oversight,
- Production of annual reports for donors,
- Relations with schools, and
- Shared responsibility for defining the content of the teaching with the school and the tutors

These points will be stated more clearly in the global grant application.

The only person for whom there may be a question is Martin Bucher, who is presently Executive Officer of the UEF. The UEF Memorandum of Incorporation provides that no officers or Directors may receive any remuneration for their services. We believe that the interests of the UEF and the Global Grant are aligned in such a way that no conflict of interest exists.

Addendum 3

Program design. Please provide a detailed program design, including an example of day-to-day scheduling and curriculum.

A more detailed design of the project including the points described in this addendum will be provided in the global grant application.

This is a novel project that meets a so far unmet but widely recognized need in South African education. As documented in the Community Needs Assessment document, there is a severe shortage of qualified secondary school mathematics teachers in South Africa. Moreover, the majority of the qualified maths teachers end up at up-market, fees-paying schools in affluent communities, leaving disadvantaged communities without adequate resources to offer the mathematics instruction as prescribed by the Department of Basic Education.

The novel idea of our programme is to use upper-level STEM university students as tutors. For the most part, after graduation these students will go on into careers in industry, finance, and government. Those going into pre-university teaching will be a minority. In South Africa, more so than in the United States and Europe, there exists a sizable for-profit sector offering extra tuition in maths and other high school subjects to students and parents wishing to improve Matric exam results, but these services are expensive and not accessible to learners in disadvantaged communities. There have been a few programmes offering maths tuition at a moderate cost to learners able to travel to a central location within the city, but these programmes do not reach communities such as Mariannridge, to which Blacks have been relocated during apartheid and which remain geographically isolated to poor families unable to bear the necessary transportation costs.

The best way to run this programme is through a properly established organization whose core mission is to provide these services. No existing organization is well suited to continuing this project. The feasibility and effectiveness of this project concept has already been proven by the pilot project started in mid-2020 (which served grade 12 learners in the final half of 2020, grade 8 learners in 2021, and grades 8 and 9 in 2022).

Currently RCDU covers transportation to and from the school on Saturdays. The school is responsible for curriculum, student selection and participation, and support to the tutors.

The school has requested that we use the CAPS from the Department of Basic Education to guide what is covered during the Saturday instruction. For Grades 7-9, the “Senior phase,” the relevant document is

<https://www.education.gov.za/Portals/0/CD/National%20Curriculum%20Statements%20and%20Vocational/CAPS%20SP%20%20MATHEMATICS%20GR%207-9.pdf?ver=2015-01-27-160141-373>

and for grades 10-12, the “FET (Further Education and Training) phase,” the relevant document is

<https://www.education.gov.za/LinkClick.aspx?fileticket=uXLZcla67rE%3d&tabid=570&portalid=0&mid=1558>

One of our future projects is for UEF to improve our curriculum by incorporating an enrichment aspect, and also buying textbooks. In the pilot project so far, the school has provided the pedagogical materials and determined what is taught on each Saturday. We felt this is the right way to start given our lack of knowledge of the local situation, but now we feel that we can improve on the curriculum, which will continue largely to follow CAPS and to be guided by the advice of the school.

Addendum 4

- **Tutors.** After reviewing the application, it sounds as though you have not yet identified the individuals who will be providing the tutoring services for this project.
 - In order for this project to be eligible, you must confirm that you have already assembled a list of individuals who are willing to serve as tutors.
 - Additionally, I have concern regarding the sustainability of relying upon students to sustain this project after the grant has ended. Once the students graduate from their programs, they will likely not continue to be available to provide tutoring services. There is likely to be a high turnover rate and need for continual recruitment and training of new tutors. What is the sustainability plan for this?
 - You also mention the desire to form a Rotaract Club for the tutors to become members of. Please note that Rotary will expect Rotary members to volunteer their service time rather than receiving payment for their services.

The Rotoract Club plan will be withdrawn.

The proposed project has been in operation as a smaller scale pilot project since 2020. We have been successful in recruiting a sufficient number of tutors. There will doubtless be turnover, but this is to be expected as these university students graduate from UKZN. However, new students will be recruited each year. In 2022 we have had 40 tutors participate in some way, and the average turnout has been approximately 20 tutors per week. Moreover, the provision of modest stipends will only make tutor recruitment easier. We therefore do not anticipate that tutor recruitment will be problematic. We have already explained in the proposal the connections to UKZN that help facilitate the recruitment of tutors.

The tutors will be organized into a student Club not related to Rotary. They will be overseen by a former UKZN student (and also former tutor in 2020), who is currently a postdoctoral researcher at UKZN funded by the Square Kilometer Array project.

In the course of the pilot project, the tutors have demonstrated a remarkable degree of competence, maturity, and initiative. We believe that the tutors can carry out a significant fraction of the management tasks presently carried out by Rotarians. It is preferable that the tutors feel an increased degree of ownership of the project and are actively encouraged to take on more initiative.

Addendum 5

- **Training plan.** Please provide a training plan for qualifying the tutors to effectively deliver the supplementary instruction if they do not already have formal training.

More details on tutor training as described below will be added into the global grant application.

The tutors are selected on the basis of excellence in their subject area. The tutors are all advanced students in STEM subjects at the University of KwaZulu-Natal, either third-year, honours (fourth year), or postgraduate students. While a formal education qualification is required to provide regular instruction at the pre-University level, no such formal qualification is required for teaching at the university level. For whatever formal education training our tutors may lack, they are stronger in subject matter knowledge than the graduates having completed a

formal teacher training programme. Therefore, we do not feel that any prior formal teacher training is necessary as a pre-requisite. This view is shared by the school principal Mr Lucky Mtungwa and former UKZN School of Education Professor Sudan Hansraj. (See the Community Needs Assessment Document interview excerpts for their comments on this issue.)

We do, however, provide the tutors with guidance and on-the-job training. New tutors are paired with more experienced tutors, and Professor Thomas Konrad comes to the school on many Saturdays to observe and provide critique and suggestions on teaching methods. Moreover, at the end of instruction each Saturday, the tutors are gathered together to discuss any problems that have arisen, new ideas, what went well, and what did not. This allows the tutors to learn from each other, sharing best practice. We believe that this practical hands-on training of the tutors is the most effective means of maintaining a high quality of instruction without placing an undue burden on the tutors.

The improvement in test scores and pass rates attests to the effectiveness of the programme, and this quantitative data is corroborated by the observations of the school principal Mr Lucky Mtungwa, whose specialty is the teaching of mathematics.

Addendum 6 --- Previsional post-2025 Budget Estimates

We have been asked to provide a projected budget for 2026 and beyond to estimate the needs of the project once it becomes sustainable. For consistency, we reprint the budget from June 2022 version of the booklet “An Innovative High School Mathematics Enrichment Programme—A Pilot Project: Mariannridge Senior Secondary School,” which is the document we presented to Atisa Securities LLC on our project, and which we shall revise at the end of 2022, when we seek additional corporate donors.

Transportation	40 000 ZAR	
Tutor stipends	60 000 ZAR	
Books and other pedagogical materials	50 000 ZAR	
Total		150 000 ZAR (per grade per year)

This is the estimated cost per grade per year, and is consistent with the costings for the Global Grant, covering the period 2022-2025. The UEF will cover from this budget the internet costs, maintenance of the computer lab, and when necessary replacement of textbooks. 150 000 ZAR is at the current exchange rate equivalent to 8 400 USD.

There are some caveats and options that we would like to leave open. Our minimal programme is to serve five grades simultaneously at Mariannridge Senior Secondary School. But we would like to expand to other high schools in the area if this turns out to be feasible. The costing for our minimal programme is 750 000 per annum. More details on the assumption of this calculation may be found in the brochure, which is available at the following site:

https://umhlatuzana-education-fund.org/wp/wp-content/uploads/2022/06/mariannridge-mathematics-proposal_6.pdf