

REQUEST FOR PROPOSAL (RFP) Mentoring & Resource Support for **TVET Engineering Lecturers**

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Michael & Susan Dell FOUNDATION

Funding Partners





Implementing Partner



National Partners



NAACAM

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I. RFP FACT SHEET

High Gear Overview

The National Association of Automotive Component and Allied Manufacturers (NAACAM) and the Department of Higher Education and Training (DHET) are the lead national partners of **High Gear**, an exciting four-year (2020-2024) initiative managed by IYF that is advancing South Africa's public Technical, Vocational, Education & Training (TVET) college system. High Gear draws on industry knowledge and skills imperatives—along with IYF curricula enhancement tools—to strengthen the market relevance of select public TVET college courses.

High Gear aims to demonstrate a model for greater industry involvement in TVET course design and delivery that generates enthusiasm from TVET educators and industry, while also generating positive returns for young people and employers.

The UK Government's Skills for Prosperity Programme is funding High Gear implementation in KwaZulu-Natal Province, and the United States Agency for International Development (USAID) and the Michael & Susan Dell Foundation are funding implementation in Eastern Cape Province. All three funding partners are supporting High Gear's national stakeholder engagement and learning efforts.

To learn more about High Gear, watch the launch video.

Progress for In-Classroom Upgrades

High Gear is drawing on partnerships with the automotive components manufacturing industry to strengthen learning and employment outcomes from NATED Level 4-6 (diploma-level) Engineering qualifications. These TVET college qualifications have traditionally been wholly focused on engineering theory, with limited to no workshop and/or workplace exposure for students.

In 2021, High Gear worked with our industry and TVET college partners in the Eastern Cape and KwaZulu-Natal to design, manufacture, and introduce lecturing demonstration kits (demokits) within select public TVET mechanical engineering and electrical engineering classrooms. The demonstration kits and their lessons plans are designed to support lecturers to deliver practical, project-based learning within resourcelimited TVET classrooms, and are aligned directly with textbook and industry-relevant concepts.

To date, IYF has introduced High Gear's engineering lecturing demonstration kits with:

- 10 engineering lecturers at Eastcape Midlands College in Kariega (Uitenhage), Eastern Cape
- 26 engineering lecturers at Elangeni College in Durban, KwaZulu-Natal

To support TVET lecturers', IYF delivered training workshops, mentoring sessions, and data collection activities for the above lecturers in Q3 and Q4 2021.

For visuals of High Gear's TVET course upgrades, please see Annex A.

TVET Lecturer Mentoring Priorities for 2022

TVET lecturers' request for additional High Gear support are largely centred around:

- More support for **lesson plan design and preparation** that leverage High Gear's engineering demokits and student-centred learning methodologies
- More support for **developing in-classroom student application assignments** that leverage the engineering demokits and student-centred learning pedagogies
- More constructive feedback from mentors related to improving in-classroom teaching methodologies

- Support to strategise around systemic challenges that lecturers encounter in the TVET system, such as high number of students per class, late arrival of textbooks, last minute timetabling, etc.
- **Development of additional classroom resources** that complement the demonstration kits, such as assembly instructions, lesson plans, and visual materials that highlight the concepts within industry.
- Support integration of High Gear's pedagogic priorities into broader TVET college teaching plans

Summary of Services Requested

High Gear is seeking to identify and contract a firm that will deliver the following in 2022:

- Maintaining and managing a qualified pool of mentors in each target metro area, including collaboratively and proactively troubleshooting challenges with those mentors and IYF
- **Design and delivery of project-based learning refresher workshops** to TVET engineering lecturers.
- Delivery of mentoring sessions to TVET engineering lecturers, focused on the priority areas above.
- **Design of complementary lecturer-facing and student-facing classroom resources** (printed and virtual) to support delivery of project-based learning in TVET classrooms
- **Design of a consolidated set of project-based learning lesson plans and classroom resources**, to support High Gear's scaling and replication of the approach to new TVET colleges.
- Regular updating of High Gear's measurement & evaluation (MERL) tools related to mentoring.

Location & Duration of Services

The selected firm will need to have mentors who are based in the **Nelson Mandela Bay and Durban metro areas**. The Master Contract will be one-year in duration, with an expected start in February 2022.

Proposal

Proposals are due by Monday, 7 February 2022 at 17:00 (SA).

See Section V of the attached Request for Proposals (RFP) for submission requirements, and the process for submitting questions on the RFP.

II. CONTRACTING MECHANISM

Master Contract

IYF will issue a Master Contract (i.e. preferred provider contract) to the selected firm that outlines:

- a) The types of services for which IYF may issue Work Orders;
- b) The Contractor's estimated unit costs per major cost category;
- c) The overall Master Contract budget ceiling, through which IYF *could* issue individual work orders.

Based on the Master Contract, IYF will then issue Work Orders for specific Scope-of-Works (SOWs). The selected Contractor will need to submit a separate budget to IYF for each Work Order, which is subject to IYF's approval.

Master Contract Duration & Renewals

The Master Contract will be for a period of one-year, with the option for renewal.

III. SCOPE-OF-WORK (SOW): MASTER CONTRACT

Contractor Responsibilities

Through the Master Contract (i.e. preferred provider contract), the selected firm will deliver the following **possible** types of products and services within future Work Orders:

A. Contract & Project Management

- Development of a Project Management Plan, detailing the firm's management approach to ensure successful deliverables.
- Establishment of a strong project management structure and communication protocols, systems including the firm's effective management of its mentor pool in Eastern Cape and KwaZulu-Natal
- Setup and management of knowledge sharing mechanisms (e.g. Dropbox or Google drive folder accessible to all), with timely training and IT support provided to the firm's staff and sub-contractors as needed.
- Sub-contracting and managing additional technical specialists (e.g. TVET qualification experts; auto industry skills experts, etc.) to cover any expertise gaps that the selected firm may have.

B. Maintain a qualified pool of mentors for TVET lecturers in Eastern Cape

- Identifying and maintaining a qualified pool of mentors in Eastern Cape (Nelson Mandela Bay Metro) and Durban, including through targeted sub-contractor recruitment if necessary.
- Independently designing and delivering capacity strengthening support to mentors, including in project-based learning pedagogies, to ensure success in their roles.
- Ensuring mentors adhere to the mentor roles and responsibilities established by High Gear (Annex C) and maintain professionalism in all interactions with lecturers and TVET management staff.

NOTE: IYF will require the selected firm to maintain an active pool of 3 to 4 mentors per province (i.e. 6 to 8 mentors in total).

Priority competencies for mentors:

1) Capable of building strong, trusted, professional relationships with TVET lecturers and effective engagement with TVET management when needed.

2) Emotionally intelligent with the maturity to know when not to overstep boundaries that may impact their deliverables.

3) Flexible attitude and comfortable with uncertainty, with a recognition that work in the TVET system requires constant adjustments and problem-solving.

4) Demonstrated expertise in both delivering training to young people using highly experiential, studentcentred pedagogies AND equipping other educators to adopt the same approach.

Mentors are NOT required to have an engineering background, but they must be comfortable supporting lecturers working in engineering disciplines. Mentors with some experience within STEM fields would have an added advantage, but the attitudinal and pedagogic priorities noted above are most critical.

C. Deliver mentoring & classroom observation sessions to TVET engineering lecturers

- Development of TVET lecturer mentoring schedules, in consultation with IYF and High Gear's TVET college partners.
- Delivery of individual mentoring sessions to TVET lecturers, ideally in-person at TVET college campuses, but virtual and/or phone-based are also allowable depending on the circumstances.

• Observing TVET lecturers' delivery of enhanced lessons in the classroom, and provision of constructive feedback afterwards to support the lecturers' continued professional development.

PRIORITY AREAS FOR TVET LECTURER MENTORING: As noted on Page 2 of this RFP, TVET college lecturers have requested the following areas for High Gear mentoring in 2022:

• Lesson plan design and preparation that leverage the High Gear engineering demokits and projectbased learning methodologies

• More support for **developing in-classroom student application exercises** that utilise experiential pedagogies and demokits

• More helpful and targeted feedback from mentors related to improving in-classroom, student-centred teaching methodologies

• Support to strategise and problem-solve around systemic challenges that lecturers encounter in the TVET system, such as high number of students, late arrival of textbooks, last minute timetabling, low resources etc.

Support integration of High Gear's pedagogic priorities into broader TVET college teaching plans

E. Design and deliver project-based learning refresher workshops to TVET lecturers

- At times, it may make sense to bring all supported TVET lecturers together in each province, to deliver a full-day and/or multi-day training session on a specific topic or packet of resources.
- With input from IYF, the selected contractor will design such workshops—including workshop agendas, facilitation guides, etc.—and lead the facilitation of these workshops with TVET lecturers.
- Lecturer training workshops should utilise a highly experiential pedagogy, with limited "lecturing" from the lead facilitators.
- IYF may also have the selected contractor lead workshop logistics, including venue hire, sourcing of caterers, etc.

F. Design of complementary lecturer-facing and student-facing classroom resources

- Design of additional classroom resources to support introduction of project-based learning pedagogies in the classroom, and lecturers' effective use of the engineering demokits.
- Additional resources can include, but are not limited to: demokit assembly plans, lesson plans, and visual materials that highlight engineering concepts within practical industry applications, lessons delivered by pre-recorded video, etc.
- Design of and/or advisory services on development of digital TVET lecturer support resources.
- Design of a final and consolidated "High Gear Project-based Learning" resource packet for TVET engineering lecturers, based on resources already designed and to-be-designed by the selected contractor.

H. Regular updating and reporting of High Gear's measurement & evaluation (MERL) tools

- Ensuring regular completion of High Gear's MERL tools related to mentoring, to support project learning and adaptive management.
- Regular reporting of mentoring progress to High Gear team.

IV. DURATION, LOCATION & IYF MATERIALS

Period of Performance

IYF would like work to commence in early February 2022 (signature of the Master Contract and Work Order 01). IYF will finalise the Work Order 1 scope-of-work and budget with the selected contractor, prior to signing of the Master Contract.

The Master Contract will be one year in duration, with the potential for renewal.

Geographic Location

The selected contractor must have the ability to deliver in-person mentoring and workshop services in the Nelson Mandela Bay Metropolitan Municipality (Eastern Cape) and the Durban metro area (KwaZulu-Natal). Mentors must be based in those two locations and be comfortable with travelling to / working in all areas of the metro.

IYF Materials

IYF will provide the selected contractor with the following materials:

- Sample High Gear electrical & mechanical engineering demonstration kits (demokits)
- Assembly instructions for each aid in the demokits
- Draft lesson plans co-designed to date with lecturers
- Mentoring protocols / roles & responsibilities
- Classroom resources developed and compiled to-date

In addition, as part of Work Order 1 with the selected contractor, IYF will deliver in-person orientation to the firm's management staff (who will be responsible for cascading orientation to mentors and other sub-contractors).

V. PROPOSAL REQUIREMENTS

Please submit to IYF the proposal requirements below by **Monday, 7 February 2022 at 17:00 (SA).** Submissions should be made via email to Kerrin Odendaal (k.odendaal@iyfglobal.org).

Proposal Questions

Questions that applicants have can be submitted to this <u>Google Doc</u>, which IYF will respond to on a real-time basis. Please allow for 2 business days for responses to submitted questions. Interested applicants can log into the Google Doc at any time to see responses to all questions submitted. The final day for submitting RFP questions is Monday, 31 January 2022 at 17:00 (SA).

Proposal Submission Requirements

Interested firms should submit a TVET lecturer mentoring proposal that is based on the priorities and variables described in this RFP and summarised in the grey box on the following page.

The mentoring proposal should detail:

- Management Team & Approach: A summary of each team member role and their expertise (full CVs not required), along with the overall project management approach that the applicant firm will use to implement this contract.
- **Other Sub-Contractors**: If the firm is proposing to work with other sub-contracted specialists (e.g. manufacturing skills experts; public TVET qualification experts; etc.), please indicate for which roles, and provide a summary of each proposed sub-contractor's experience.
- Mentor Competencies, Sourcing & Management Approach: Detail the background/competencies
 of mentors that the firm will prioritise for this contract. If the firm has existing mentors in Nelson
 Mandela Bay Metro and/or Durban that it would like to propose, please do so, and provide a
 summary of each mentor's experience (full CVs not required). If the firm will need to source new
 mentors should it secure this contract, please detail its approach and timelines for doing so, and
 previous examples of rapid mentor sourcing and mobilisation. Lastly, detail how the firm will
 manage its mentorship pool under this contract, ensuring there is a high degree of professionalism
 and ethics, with a focus on quality delivery.
- Mentoring & Resource Development Approach: Based on the information contained in this RFP and summarised in the grey box on the following page—propose how your firm would approach mentoring under this contract, including: a) mentorship structure/scheduling, including frequency of individual mentoring sessions and lecturer training workshops; b) highest priorities areas for lecturer mentoring support and how the firm would deliver on those priorities; c) highest priorities for classroom resource development and how the firm would deliver on those priorities; d) how the firm would manage for uncertainty in the system, including possible last-minute changes in timetables and lecturer availability for mentoring; and e) how the firm will guide and support mentors to problem-solve and deliver on their key objectives.
- **Past Experience:** Narrative overview of the firm's expertise, experience and track record, together with select training material samples (e.g. lesson plans, facilitation guides, etc.), particularly in relation to the possible roles and responsibilities outlined in the Master Contract SOW.
- **References:** At least three reference letters from current or past clients, with contact information should IYF wish to reach out further.
- Average unit costs, submitted in the Unit Costing template (Annex B). Note we are <u>not</u> requesting a full budget at this time, but rather the unit costs for major cost categories that would likely be included in future Work Orders under this Master Contract.
- Most recent B-BBEE Certificate
- SARS Tax Clearance Certificate

Variables & Priorities to Consider for Proposal Development

- **Problem Statement:** The High Gear project needs to adjust its TVET lecturer mentoring services for 2022 to better meet lecturer demand and requests, and to develop a consolidated set of project-based learning resources that will enable High Gear to expand its TVET course upgrade model to other colleges.
- High Gear Progress to Date: High Gear has provided 36 TVET engineering lecturers with engineering demonstration kits and complementary lesson plans and other classroom resources (see Annex A for visuals). In addition, High Gear delivered workshop training and individual mentoring sessions to each lecturer in Q3 and Q4 2021.
- Number and Location of Lecturers High Gear is Supporting: 10 supported engineering TVET lecturers are based at Eastcape Midlands College in Kariega (Uitenhage), Eastern Cape, and 26 supported engineering lecturers are based Elangeni College in Durban, KwaZulu-Natal.
- Feedback from Lecturers on 2021 Mentoring: Lecturers are very enthusiastic regarding High Gear's engineering demokits and regard them as a valuable resource for teaching and learning in their classrooms. High Gear mentoring delivered in 2021, however, did not significantly improve lecturers' confidence regarding lesson plan preparation and implementing student-centred learning. Lecturers would also like more problem-solving support on systemic challenges that they face in their work, such as dealing with large class sizes, navigating the late arrival of textbooks, low resources, short trimesters and last-minute timetabling changes.
- Priorities for 2022 Mentoring & Resource Development: Lecturers would like more support with: a) lesson plan design and preparation linked to High Gear's engineering demokits; b) developing and executing inclassroom student application assignments that use experiential methodologies and leverage the demokits; c) problem-solving support from mentors on systemic challenges faced in the TVET system; and d) development of additional classroom teaching and learning resources.

• "Room for Maneuver" for Delivering Mentoring within the TVET College System:

- **2022** *Timetable:* High Gear is working specifically in the NATED Level 4-6 Mechanical Engineering and Electrical Engineering qualifications. The <u>timetable for these qualifications in 2022</u> is:
 - <u>Trimester 1:</u> Staff commence on 28 Feb; Classes commence on 16 March; Classes end 24 June; Exams 27 June 15 July. *Lecturing Days: 66; Lecturing Staff Service Days: 93.*
 - Academic Break: 15 July 10 August
 - <u>Trimester 2:</u> Staff commence on 10 Aug; Classes commence on 15 Aug; Classes end 11 Nov; Exams 14 Nov – 02 Dec. *Lecturing Days: 65; Lecturing Staff Service Days: 83.*
 - Trimester 3: Due to COVID disruptions in 2021, Trimester 3 will only commence in 2023.
- Lecturer Availability for Mentoring & Workshops: Within the above timetable, lecturers have typically been available for 2-3 one-hour mentoring sessions per month while classes are in session. Lecturers may have more availability during exam periods, and are generally unavailable during academic breaks. IYF has found that we are able to host two-day in-person workshops with all participating lecturers one to two times per year, max.
- Online Teaching & Learning Constraints: Both lecturers and students have unreliable access to internet and devices required for online teaching and learning. IYF has found that in-person mentoring of lecturers is most effective, but it is good to also plan for telephone-based mentoring contingencies. Virtual mentoring has not been effective due to technology and data constraints.

• Sustainability Considerations:

- "Graduating" Lecturers from Mentoring: High Gear's measurement and evaluation tools—which included scores from lecturers on their confidence in High Gear's project-based learning methodology—should allow for graduating lecturers from individual mentoring sessions.
- Embedding Lecturer Development Resources in the TVET System: IYF sees two major avenues for embedding High Gear's project-based learning lecturer development support in the TVET system. The first is working with Senior Lecturers to equip them to provide more effective coaching to their lecturing team (with regards to the areas where High Gear is focused). The second is developing a consolidated set of lecturing support resources that are accessible through DHET's online Lecturer Support System (LSS) platform.

VI. SCORING

IYF will evaluate submissions against the following criteria (50 total possible points):

- Relevant expertise to deliver high-quality training services (20 points)
 - The firm has demonstrated experience—including strong references—to deliver on the key objectives of this RFP (5 points)
 - The firm has demonstrated in-house expertise to design and delivery quality training to educators on student-centred teaching and learning methodologies (5 points)
 - The firm has prior experience building teacher/lecturer capacity within public education institutions in South Africa (basic education or higher education) (5 points)
 - Training samples are of high quality and demonstrate consultant's knowledge of experiential, student-centred learning and teaching approaches (5 points)

• Adaptive Management Approach (10 points)

- The firm proposes a strong management team and approach, including realistic approaches for managing complexity and uncertainty that is inherent in this work (5 points)
- The firm has a sound approach for managing mentors and other sub-contractors, and ensuring they maintain a high degree of professionalism and codes-of-practice in their work with High Gear's public education partners (5 points)
- Unit Costs (10 points)
 - The firm's unit costs are reasonable and aligned with market rates for similar levels experience/expertise (10 points)

• Supplier equity (10 points)

• Sliding point scale, based on supplier's certified B-BEEE status.

Should two bidders tie on the final scoring of their proposals, IYF will consider the individual scores under each criteria. Scoring under "Adaptive Management Approach" will be the tiebreaker; followed by relevant expertise; followed by unit costs, followed by supplier equity.

ANNEX A: HIGH GEAR TVET COURSE UPGRADE VISUALS

Please see separate attachment in the RFP email

ANNEX B: UNIT COST TEMPLATE

Please see separate attachment in the RFP email

ANNEX C: HIGH GEAR MENTOR ROLES & RESPONSIBILITIES

In lecturer preparation sessions, High Gear mentors should:

Mentor Tasks/Roles	High Gear Resource
Train lecturers to assemble each demokit aid so lecturers can easily assemble the aids for teaching themselves.	Demokit assembly instructions
Offer every lecturer a selection of <u>pre-approved</u> resources, i.e. suitable teaching aids (e.g. visuals) that they can use for their own upskilling and in classroom teaching if they wish to do so. These resources should be linked to the topics outlined in the 'demokit concepts, teaching, and troubleshooting notes' and uploaded to the assigned electrical or mechanical engineering folder.	 Demokit concepts, teaching, and troubleshooting notes Electrical & Mechanical Engineering Dropbox folders (lecturer resources sub-folder)
Provide the lecturer with a list of suitable everyday and industry uses for the engineering topics that the lecturer is teaching. The 'troubleshooting notes' outlines some general uses but more examples need to be added and these can be accompanied with pictures.	 Demokit concepts, teaching, and troubleshooting notes
Train lecturers in how to demonstrate the aids when teaching engineering concepts in class.	N/A
Train lecturers in how to involve students in demonstrations in classes, including promoting student-centred teaching and learning approaches.	 Electrical & Mechanical Engineering Dropbox folders (student application sub- folder))
Train lecturers in how to use techniques to check understanding at each stage of the lecture.	Mentor Training slides and training from mentor workshops

In **TVET classrooms**, mentors should:

Mentor Tasks/Roles	High Gear Resource
Observe and take notes of the use of the demokit aids, demonstrations, introducing industry uses for the tools/topics and student exercises whilst, the lecturers are teaching.	PBL Mentoring Session Reflection form and tool
Only in rare cases can a mentor assist the lecturer with demokit assembly in the classroom, should the lecturer be struggling AND directly invite the mentor to assist. Mentors should never volunteer their assistance if not invited by the lecturer. In cases where assistance with the demokit is requested, the mentor will subsequently work with the lecturer to refresh them on assembly steps, so that the mentor's assistance in the classroom is not required again or repeated.	Demokit assembly instructions

<u>In no cases</u> should the mentor:

• Assist in delivering lectures in the classroom, even if invited by the lecturer.

- Answer questions from students in the classroom, even for questions re-directed by a lecturer
- Interject a lecturer's session with their own subject matter/content input.

After observed lectures, mentors should:

Mentor Tasks/Roles	High Gear Resource
Hold one-on-one feedback with lecturers, based on the mentor's observations, with a focus on providing constructive and positive feedback. The mentor and lecturer should also complete the mentoring reflection form together.	 PBL Mentoring Session Reflection Form
Submit the completed PBL Mentoring Session Reflection form immediately after the discussion.	Dropbox folder