

UNIVERSIDAD PARA LA COOPERACION INTERNACIONAL

(UCI)

PROJECT MANAGEMENT PLAN FOR THE IMPLEMENTATION OF A
COMMUNICATION CAMPAIGN STRATEGY FOR ITZ' AT STEAM ACADEMY.

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THE REQUIREMENTS FOR THE
MASTER'S IN PROJECT MANAGEMENT (MPM) DEGREE

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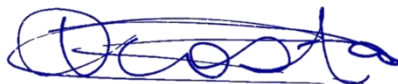
(UCI)

This Final Graduation Project was approved by the University as
partial fulfillment of the requirements to opt for the
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Dedication

This final graduate project is dedicated to my beloved husband, who has always been my rock. Your encouragement has pushed me to strive for excellence, even when I doubted myself.

To my precious children, Manuel and Sophia Acosta, you are the source of my motivation and inspiration. Your patience and understanding during times when I couldn't be fully present have made this journey easier. To my mother, Nidia May, thank you for stepping in when I needed you the most. Thank you for all the hot meals and the endless drop-offs you facilitated throughout the past year.

This project is a testament to the love and support of my family, without whom this accomplishment would not have been possible. I am eternally grateful for their presence in my life, and I dedicate this achievement to them with love and gratitude.

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I am grateful to the Ministry of Education, Culture, Science and Technology for allowing me to develop my Final Graduate Project using the Itz'at Communication Campaign Project. A special Thanks to the project team that answered my endless questions.

Abstract

The general objective of this document is to create a Project Management plan that will manage the implementation of a Communication Campaign for Itz'at STEAM Academy (ISA) in Belize. ISA is a government high school with a focus on STEAM and career-related pathways. The Communication Strategy will also serve to recruit the first cohort of seventy-five students into the school. The Project Management Plans will serve as an organizational asset when implementing campaigns similar in nature. The plans will ensure the effective execution of the fixed-budget campaign within a stringent timeline. The effectiveness of the campaign will be measured by the number of applicants to the Itz'at STEAM Academy. The Project Management Plan includes the following: management plan for integration, scope, schedule, cost, quality, resources, communications, risks, procurement, and stakeholders. The methodology used to develop this Final Graduation Project were Qualitative, Quantitative and Analytical Research. Lack of standards for organizing, planning, controlling, and executing activities to fulfill project objectives and benefits makes implementing a project without a project management plan a challenge by nature. Consequently, a thorough project management plan is necessary to effectively manage and implement the ISA Communication Campaign. It helps project team members and stakeholders communicate effectively. Additionally, the project management plan ensures that project management procedures are consistent, that knowledge domains are integrated, and that organizational and PMI (Project Management Institute) standards are followed. This strategy reduces changes during the project's lifespan by offering a road map for project management and implementation.

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Abbreviations and Acronyms

- AOP: Annual Operating Plan
- BESPlan: Belize Education Sector Plan
- BESRP: Belize Education Sector Reform Program
- CDB: Caribbean Development Bank
- CABEI: Central American Bank of Economic Integration
- CCPM: Critical Chain Project Management
- EQIP II: Education Quality Improvement Program- Phase II
- FPG: Final Graduation Project
- IDB: Inter-American Development Bank
- MoECST: Ministry of Education, Culture, Science and Technology
- PEU: Project Execution Unit
- STEAM: Science Technology Engineering Art and Mathematics
- ISA- Itz'at STEAM Academy

Executive Summary

The Government of Belize through the Ministry of Education, Culture, Science, and Technology (MoECST) invested in the Education Quality Improvement Program- Phase II (EQIP II) in 2020 and is currently being executed. The objective of the program is to improve the quality of education at the primary and secondary levels, with a special focus on innovation in Science, Technology, Engineering, Arts and Mathematics (STEAM) education. Component 2.1 is focused on the design and construction of the STEAM Laboratory School Infrastructure (Itz'at STEAM Academy) and is budgeted at USD \$3.66 million. It is financed by the Inter-American Development bank (IDB), Counterpart Government funds and the Bank's Grant Facility (POM,2020).

The school is the first STEAM-dedicated government high school in the country. It will serve marginalized communities of the South side while attracting students from the North side who have a greater inclination to STEAM-related subjects. Being one of thirteen schools in the city, the campaign needs to highlight key features which set this school apart from the others.

MoECST, through the Project Execution Unit (PEU), will lead the initiative to promote the school by implementing a Communication Campaign. The goal of the campaign is to enroll seventy-five students into the school by June 2023 within the first year of opening. The campaign will also aim at promoting STEAM education to the female student population in Belize. The PEU is an understaffed unit and will rely on a cross-section of team members to execute the communication campaign. The project management plans will assist to guide

future promotional campaigns that are STEAM related. The documents produced by this Final Graduation Project will cover the ten knowledge areas of Project Management and will serve as Organizational Process Assets for pipeline project: Skills for the Future Program.

The general objectives for this Final Graduation Project were to create a Project Management plan that will manage the implementation of a Communication Campaign Strategy for Itz'at STEAM Academy in Belize. The Specific objectives are as follows: to develop a project charter to define the key aspects of the communication campaign strategy required for implementation; to develop a scope management plan to organize activities required into manageable phases for the execution of the communication campaign; to elaborate a schedule management plan to ensure that all tasks are completed within the stringent time frame; to develop a cost management plan in order to estimate the funds required for the different activities of the campaign; to generate a quality management plan to define the specifications required for goods or non-consulting services to be procured as part of the campaign; to outline a resource management plan to indicate the resources that will be used to implement the campaign; to outline a communication management plan to relay timely and efficient messages among team members and stakeholders; to formulate a risk management plan to minimize risks related to the project; to propose a procurement management plan to identify the procurement method to source resources as defined by thresholds set by the funding agent; and to develop a stakeholder management plan to engage all the necessary stakeholders in creating and executing the communication plan for the Itz'at STEAM Academy.

The methodologies for the creation of the PMP for this project involved a combination of qualitative, quantitative, and analytical research methods. Qualitative research was used to gather knowledge for the development of each of the specific objectives. Quantitative research was used to calculate time, cost and resources estimates that were critical in completing the PMP. Analytical research was used to investigate and further develop the inputs for each knowledge area. Important to note is that a Guide to the Project Management Body of Knowledge 6th edition, was used throughout the development of the PMP. The PMBOK Guide seventh edition was used to reference the Project Performance Domains. This project will be executed in five phases: Project Planning, Conceptual Designing, Design Execution, Pre-Launching and Project Closeout & Launch. These five phases will be executed in 111 days, to conclude June 25, 2023. Focus should be dedicated on the task included on the critical path to ensure there are no delays when executing the plan. The project's budget is BZD \$76,982.40 calculated using parametric estimating in the rough order of magnitude.

1. Introduction

1.1 Background

The Government of Belize through the Ministry of Education, Culture, Science, and Technology (MoECST) invested in the Education Quality Improvement Program- Phase II (EQIP II) in 2020. The objective of the program is to improve the quality of education at the primary and secondary levels, with a special focus on innovation in Science, Technology, Engineering, Arts and Mathematics (STEAM) education. Component 2.1 is focused on the design and construction of the STEAM Laboratory School Infrastructure (Itz'at STEAM Academy) and is budgeted at USD \$3.66 million. It is financed by the Inter-American Development bank (IDB), Counterpart Government funds and the Bank's Grant Facility (POM,2020).

Itz'at STEAM Academy is a first-of-its-kind, secondary education institution being established in Belize. The school will be a model for providing individualized instruction to ensure that all students develop the skills necessary to be employable in digital transformation and innovation and STEAM subjects; and attain a high school diploma. The school's contemporary design will set it apart from the neighboring structures. The key features of the facility include a fully equipped Media Studio, Science lab and Maker Space. The pedagogy of the school is student-centered with inter-disciplinary approaches that embrace project-based learning. This will increase the student's innovation and zeal for learning and problem solving (Curriculum Architecture, 2021).

The school is one of thirteen high schools in the Belize District. It is located in the heart of the city making it accessible to both North side and South side students. The school's

aim is to cater to the needs of students in the marginalized communities of the south side while attracting students from the North side who have a greater inclination to STEAM-related subjects. Being one of the newest schools in the city the campaign needs to set this school apart from the others.

MoECST, through the Project Execution Unit (PEU), will lead the initiative to promote the school by implementing a Communication Campaign. The ministry has a communication officer who will work alongside the Project Coordinator to ensure that the Communication Strategy is deployed. The goal of the campaign is to get seventy-five students to enroll into the school by June 2023 within the first year of opening. The campaign will also aim at promoting STEAM education to the female student population in Belize.

1.2 Statement of the Problem

The Project Execution Unit (PEU) of MoECST implemented EQIP I and the Belize Education Sector Reform Program (BESRP) in 2016. The unit has since experienced a change in staffing due to a pause in the BESRP II projects and the end of the contract for key personnel. The post of Procurement Specialist, Clerks of Works, Administrative Assistant and Program Coordinator remained vacant for prolonged periods of time at varying time intervals with two posts remaining vacant today. The PEU is currently staffed by four individuals who perform additional roles to ensure that the projects are managed accordingly. Three of the unit members have less than two years at the unit. The Financial Specialist serves as the institutional knowledge since she has been with the unit since its inception. The Communication Unit of the ministry has one Press Officer who has the technical expertise required to plan the Communication campaign activities. The IT Unit has been assigned to

assist with Logo development and website development. From these units, a team of seven people will dedicate part-time hours to the development of the different activities of the campaign. The members of the unit are familiar with project documents, but they do not use them as part of the project management of EQIP II not BESRP II. The plans that will be created for the FGP are not required by the banks for the reporting commitments of the unit. The IDB provides templates that are populated by the unit for the reporting exercises.

Given that the Itz'at STEAM Academy is new in various aspects ranging from infrastructure to program offerings, it is important that sufficient interest is generated in the school. The goal of the campaign is three-fold. Firstly, to promote the vision of the MoECST and the Government of Belize in introducing STEAM education in schools. Secondly, to inform the target audience of another option for schooling. Thirdly, to get students to enroll into high school. The questions remain: How can interest be generated in a newly established high school which presents innovative teaching pedagogy in Science, Technology, Engineering, Arts and Mathematics? Is it possible to get seventy-five students to apply annually to Itz'at STEAM Academy by carrying out an extensive communication campaign about the school and its vanguard pedagogy?

1.3 Purpose

The Itz'at STEAM Academy Communication Campaign is the first promotional campaign for a school that the ministry will embark on without the assistance of a consultant. The project management plans will assist to guide future promotional campaigns that are STEAM related. In the coming year, the government will expand the number of STEAM facilities available in the country. This investment will require a promotional campaign that

will be similar in nature. The documents produced by this Final Graduation Project will serve as Organizational Process Assets for pipeline project: Skills for the Future Program.

The Project Management plan will consist of plans to address the ten knowledge areas of Project Management. The FGP plans that will be delivered will ensure that the project is managed among a team of professionals that will be dedicated to the venture on a part-time basis.

1.4 General Objective

To develop a project management plan for a communication campaign to ensure enrollment for the newly established Itz'at STEAM Academy in Belize City.

1.5 Specific Objectives

The Specific objectives for the FGP include the following:

1. To develop a project charter to define the key aspects of the communication campaign strategy required for implementation.
2. To develop a scope management plan to organize activities required into manageable phases for the execution of the communication campaign.
3. To elaborate a schedule management plan to ensure that all tasks are completed within the stringent time frame.
4. To develop a cost management plan to estimate the funds required for the different activities of the campaign.
5. To generate a quality management plan to define the specifications required for goods or non-consulting services to be procured as part of the campaign.

6. To outline a resource management plan to indicate the resources that will be used to implement the campaign.
7. To outline a communication management plan to relay timely and efficient messages among team members and stakeholders.
8. To formulate a risk management plan to minimize risks related to the project.
9. To propose a procurement management plan to identify the procurement method to source resources as defined by thresholds set by the funding agent.
10. To develop a stakeholder management plan to engage all the necessary stakeholders in creating and executing the communication plan for the Itz'at STEAM Academy.

2. Theoretical Framework

A project management plan offers a blueprint to stakeholders and end-users surrounding the execution of an upcoming project. It helps to reduce risks, create buy-in, gather the team's expertise, align communication, and ensure resource availability (Rudder, 2022). Some of the challenges that the Itz'at STEAM Academy Communication Campaign team can face include insufficient commitment of team members that have been assigned the task since they may see this as additional duties and may not prioritize the tasks. The team members need to agree on the scope of the project, assign the tasks according to expertise, agree on milestones associated with the project so that they can plan and distribute the workload, accordingly, identify and mitigate the risks of negative press or low enrollment due to poor communication. Establishing project management plans will ensure that the project meets the needs of the stakeholders.

2.1 Company/Enterprise framework

The following is an introduction to the Project Execution Unit as it relates to its position in the organizational structure of the MoECST. The PEU has been understaffed for the past two years with personnel carrying out overlapping functions. For instance, the administrative assistant had been tasked with some of the duties of the Project Officer. All the personnel at the unit have two years on average as part of the unit; except for the Financial Specialist who has been with the unit since its inception in 2011.

2.1.1 Company/Enterprise background. The PEU of MoECST was created in 2011 for the execution of the "Belize Education Sector Reform Program (BESRP) financed by the Caribbean Development Bank (CDB). The unit was strengthened by the addition of personnel

to manage the Education Quality Improvement Program Phase II (EQIP II) (POM, 2020). The unit has seen a change in its three previous project coordinators and a change in staffing over the years. Most recently and because of the 2020 General Elections, there has been a change in the Ministry's administration. The unit functions under the mission and vision of the Ministry of Education, Culture, Science and Technology and executes activities in alignment to the Belize Education Sector Plan 2021-2025.

2.1.2 Mission and vision statements. The mission of the MoECST is: “The MoECST of Belize is charged with the responsibility of ensuring that all Belizeans are given an opportunity to acquire those knowledge, skills, and attitudes required for their own personal development and for full and active participation in the development of the nation.” (BESPlan, 2021)

The vision of the MoECST is, “The Education System of Belize will be inclusive, accessible, equitable, of high quality, technologically driven and capable of fostering the development of good, productive citizens.” (BESPlan, 2021)

2.1.3 Organizational structure. The first strategic Priority for the MoECST in the Belize Education Sector Plan (BESPlan), 2021, is “Reforming the System of Education.” The organizational structure was redesigned to be in alignment with the ministry's legislated functions. The Minister of Education, Hon. Francis Fonseca and the Minister of State, Hon. Louis Zabaneh are supported by the Senior Management team. The Senior Management team is composed of Mrs. Diane Castillo-Maheia (Chief Executive Officer, CEO), Ms. Yolanda Gongora (Chief Education Officer), Mrs. Cecilia Ramirez-Smith (Deputy Chief Education Officer), Ms. Keisha Crown (Administrative Officer) and Mr. Dylan Reneau (Finance

Officer). The Policy and Planning Division falls under the direct supervision of the CEO, Diane Maheia. This Policy and Planning Division houses four units, one of which is the Project Execution Unit as illustrated in Figure 1.

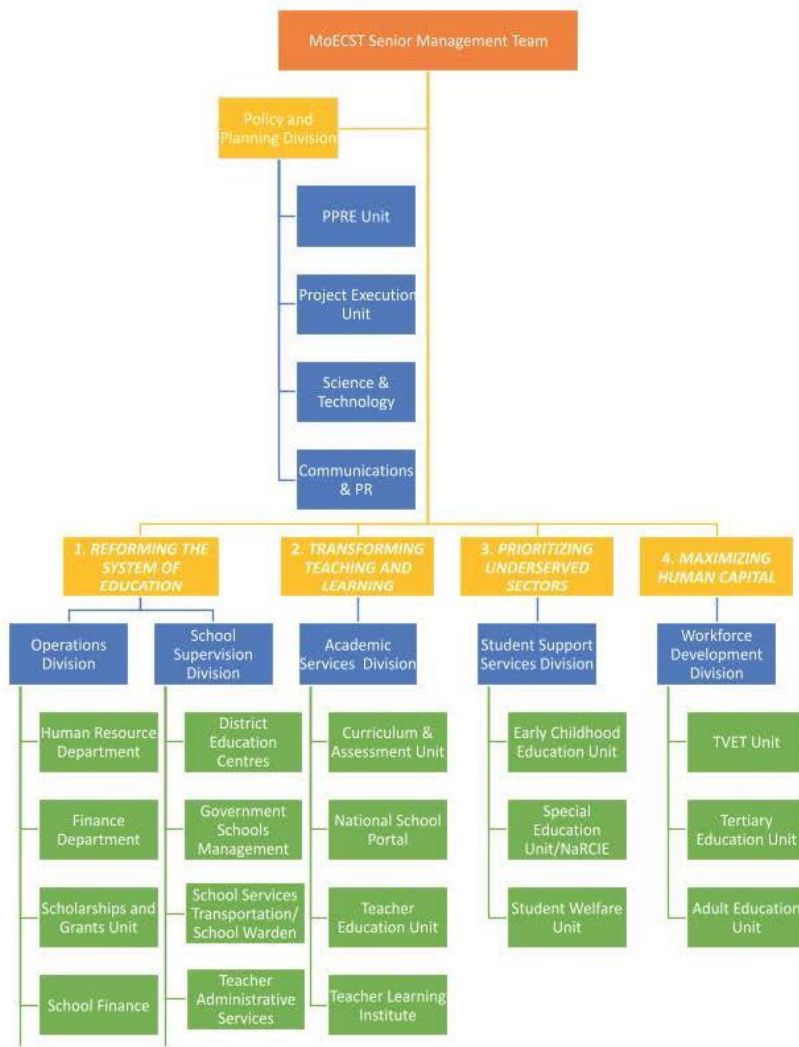


Figure 1. Organizational Structure of MoECST. Copyright 2023 by MoECST Website. Reproduced with permission.

As can be seen in Figure 2, the Project Execution unit is headed by the Senior Project Coordinator who is assisted by the Administrative and technical staff. The unit is responsible

for executing project activities related to BESRP II and EQIP II. The unit is currently understaffed and has vacant posts for Education Specialist, Clerks of Works, and Procurement Officer. The Technical Advisory committee is made up of different subject matter experts deemed fit for the project area being executed and serve a consultative purpose. The FGP will provide useful project management plans not only for the PEU but for the Communication Unit that will execute similar campaigns in the future.

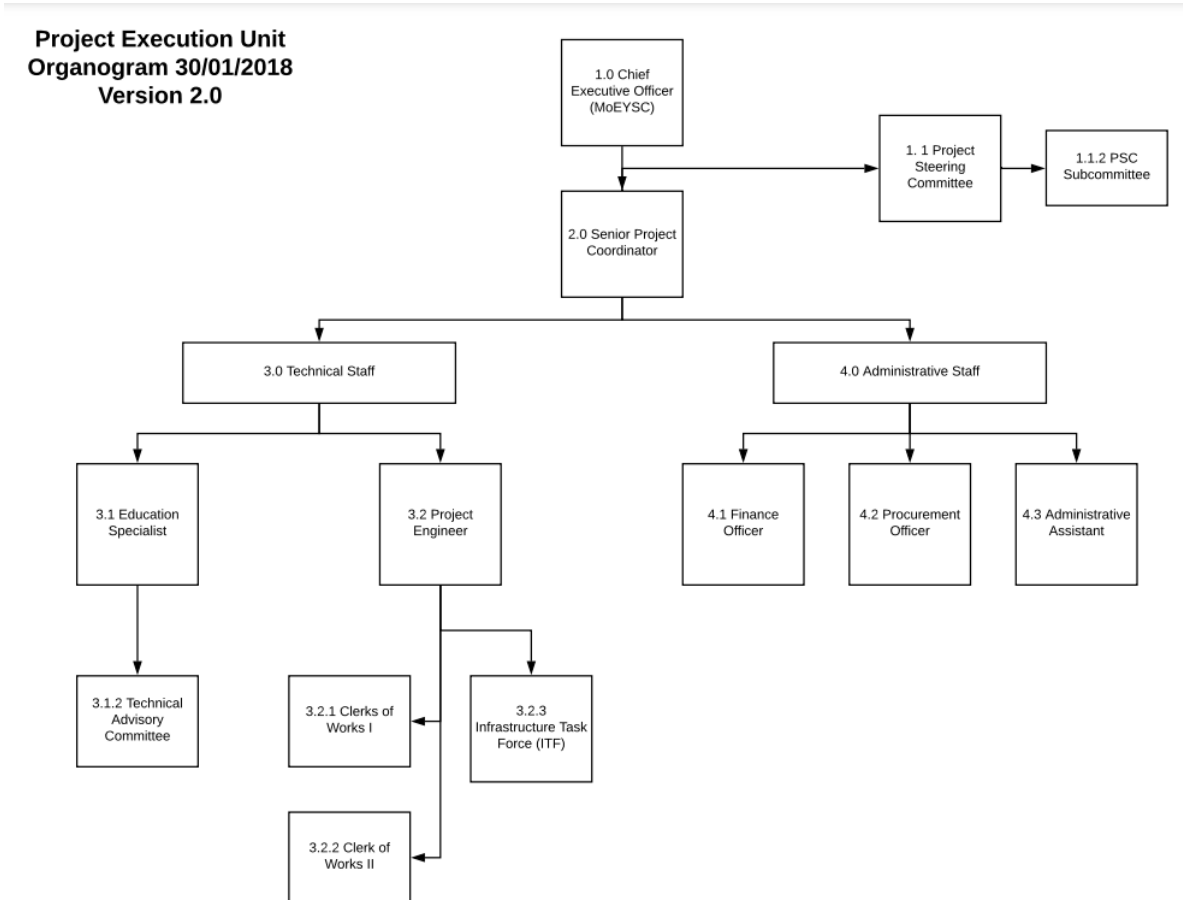


Figure 2. Organizational Structure of the Project Execution Unit. Copyright 2020 by POM. Reproduced with permission.

2.1.4 Products offered. The PEU is responsible for preparing the Annual Operations Plan which outlines the planned activities used to monitor the program progress, timeline, and responsible personnel for the tasks. The Monitoring and Evaluation Plan and the Program Procurement Plan are two documents which are prepared by the unit and presented to the IDB (Funding Agent) for its No Objection and Approval. The Project Status updates are provided monthly to the lead education specialist and in the quarterly Portfolio Review exercise held by the IDB. In the development of the program, the Risk Matrix, Results Matrix, and RACI charts were developed. The Unit receives progress reports and quarterly reports from the consultants hired for individual project sub-components.

2.2 Project Management Concepts

The Project Management Body of Knowledge (PMBOK Guide) establishes that projects enable business value creation. The project management plans to be delivered as part of this FGP will be based on the concepts established in the PMBOK Guide sixth edition as well as the Project Performance Domains outlined in the PMBOK Guide seventh Edition. The plans, the knowledge, skills and tools and techniques of project management will be applied to the implementation of communication campaigns led by the MoECST.

2.2.1 Project Management Principles. A principle is a norm, rule, value, or fundamental truth which serves as a guide for behaviour or action (Harrin, 2022). The PMBOK Guide® Seventh Edition introduced the twelve principles of project management that project managers should work by. They are meant to inform our actions.

► **Be a diligent, respectful, and caring steward-** special emphasis will be placed on this principle to ensure that the project manager's code of ethic is followed.

- ▶ **Create a collaborative project team environment-** especially since the team has not previously worked together, it is important to foster a collaborative spirit which will be needed to keep everyone accountable.
- ▶ **Effectively engage with stakeholders-** the stakeholders will need to be carefully managed as the needs of the FGP need to align with the requirements of the financing agent.
- ▶ **Focus on value-** This is the most fundamental aspect of the FPG. In preparing the project management plans, the focus needs to be on the value that the documents will have. As Elizabeth Harrin wrote, “Challenge where you don’t see it, and look to get more of it with everything you do.”
- ▶ **Recognize, evaluate, and respond to system interactions-** there are several opportunities for the PEU to collaborate with other units within the Policy and Planning Division. There is additionally the opportunity to work alongside the PEU of another Ministry.
- ▶ **Demonstrate leadership behaviors-** currently the PEU follows a hierarchical management style and by the end of the FGP process, the leadership styles of other members should be considered.
- ▶ **Tailor based on context.** - it is important not to create processes for the plan that makes the work of the PEU bureaucratic and unnecessary. All the plans need to be tailored to the size of the project, Maturity of PEU unit and the quality of the outcome (Harrin, 2022).
- ▶ **Build quality into processes and deliverables-** care must be taken not to gold-plate the deliverables but a PM needs to influence how the deliverables are presented.
- ▶ **Navigate complexity** - accept that complexity exists within the small PEU. This complexity will influence the strategies, techniques and approaches that will fit the unit.

- ▶ **Optimize risk responses-** this will only happen if risks are managed properly
- ▶ **Embrace adaptability and resiliency-** the importance of wellness and work/life-balance will ensure that the team builds resiliency, and it will enhance the team's adaptability.
- ▶ **Enable change to achieve the envisioned future state-** change management will be required to ensure that the documents created as part of the FGP are used at the end of the project.

2.2.2 Project management domains. The PMBOK Guide® seventh edition identifies and describes eight project performance domains that are guided by the principles of project management. The principles guide behavior, while the performance domains present broad areas of focus in which to demonstrate that behavior.

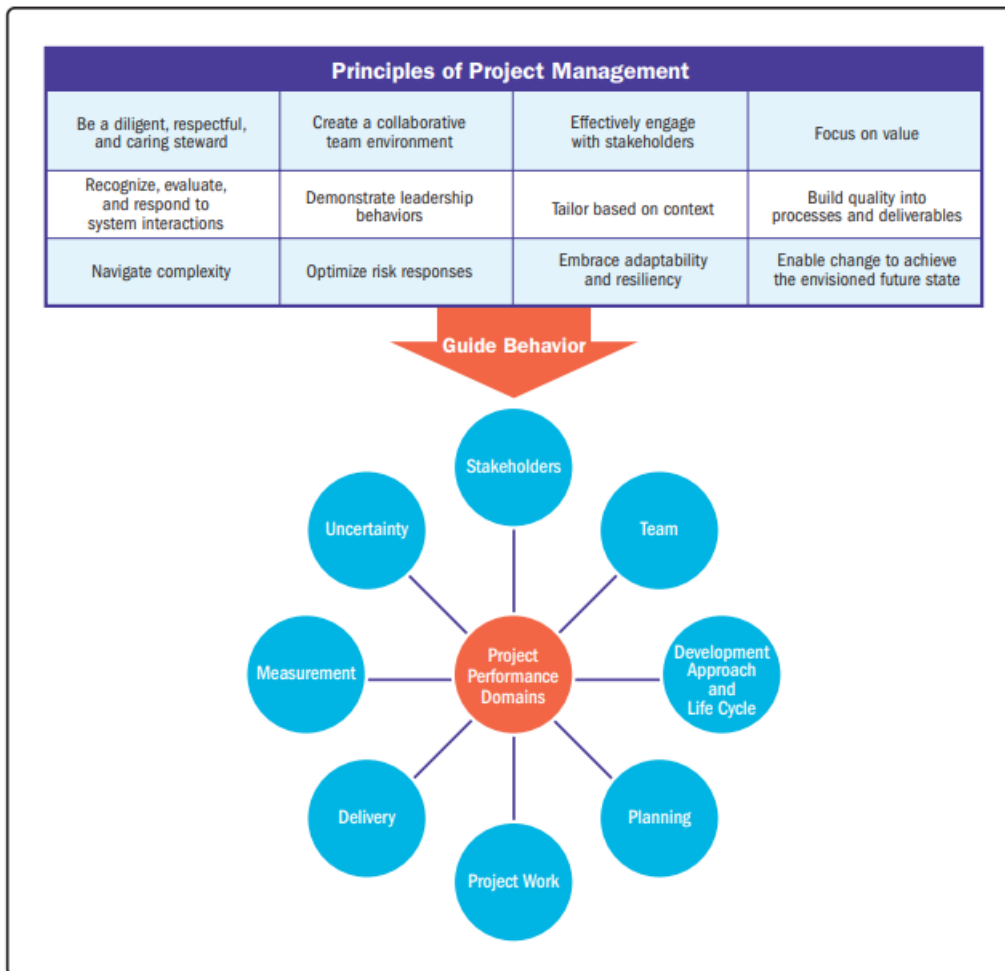


Figure 3. Relationship between Project Management and Project Performance Domains. Copyright 2021, PMI PMBOK 7th Edition.

According to the PMBOK Guide 7th Edition, the eight project performance domains are:

- ▶ **Stakeholders**- engaging the stakeholders will ensure that there is a productive team that will be committed to achieve the planned outcomes of the project.

- ▶ **Team-** a high-performing team who share ownership of the project management plans will be the indication that this domain was executed during the FGP.
- ▶ **Development Approach and Life Cycle-** the approach and lifecycle of the FGP should be consistent with the project deliverables. The phases should facilitate the deliverables.
- ▶ **Planning-** The organization and coordination of the FGP must be deliberate to be able to match the needs of the team.
- ▶ **Project Work-** for the efficient and effective project performance the PEU members engaged in the development of the FGP should manage the communication with stakeholders, manage the physical resources and be open to continuous learning and process improvement.
- ▶ **Delivery-** it is important that the project outcomes are delivered within the time frame. That the stakeholders accept and are satisfied with the plans that will be developed.
- ▶ **Measurement-** it is important to make timely decisions based on reliable information.
- ▶ **Uncertainty-** it is important to understand how changes within the environment of the PEU can affect the output of the project. Opportunities that are identified should be realized to improve the project's outcomes.

2.2.3 Predictive, adaptative and hybrid projects. In a predictive or waterfall life cycle, the project scope, time, and cost are set from the beginning and there is little to no

room for variations (PMBOK, 2017). Projects that are developed in this manner abide by stringent procedures to manage changes due to the concept of the Triple Constraint. Being that the Itz'at STEAM Academy Communication Campaign will be funded by the IDB, the bank's procurement procedures must be followed to access the funds. The budget and procurement method for the project was well defined and established; therefore, it received no objection from the bank to proceed. The project is to last for eight months.

Adaptive life cycles are agile, iterative, or incremental. The detailed scope is defined and approved before the start of an iteration (PMBOK, 2017. p19). This type of development allows for uncertainties within the project. At the start of the FPG, the school branding was being developed. The name, logo and colors were under development. The school programs were still being designed. The admissions policies and procedures were to be vetted. These activities were preconditions for the launch of the campaign. These areas had to be improved before the messaging of the school could be determined. Past this phase, the campaign would run like any other. Media campaigns, talk shows, social media promotion, road shows, billboards, commercial, flyers, campaign paraphernalia would be planned for thereafter.

The development life cycle of the Itz'at STEAM Academy Communication Campaign will follow a hybrid life cycle model. The Hybrid life cycle is a combination of predictive and adaptive life cycle. There are several combinations and degrees to which the project can be managed with the predictive or adaptive methodologies (PMI, 2022). The one that is most suitable for this project is illustrated in Figure 3. The project has a small agile element within a chiefly serial project. Since some elements of the school are still being developed there is a portion of uncertainty in the message of the campaign. The other

milestones for the project are predictable. There are some aspects of the plan that can be generated and then there are the other aspects that are still evolving and would follow an adaptive development life cycle.

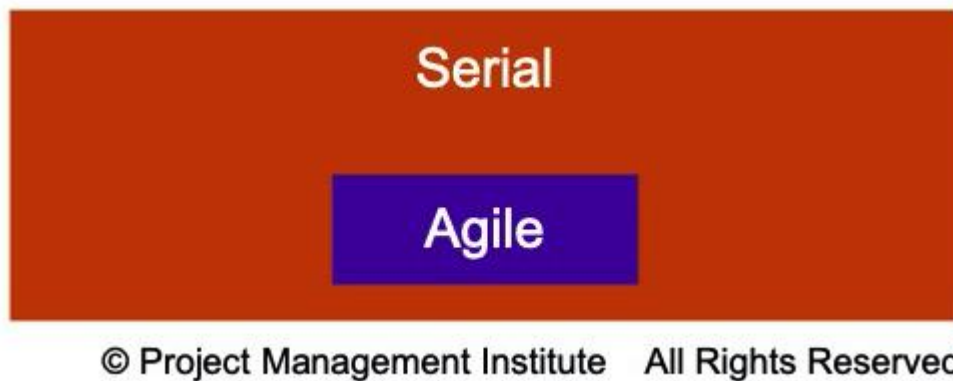


Figure 4. Description of the hybrid approach of the Project Life Cycle for Itz'at Communication Campaign. Copyright 2022, PMI PMBOK Guide 6th Edition.

2.2.4 Project management. Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements (PMBOK, 2017). In a global economy of constant growth and low margin for wastage, project management has become increasingly important. Project management enables organizations to execute projects effectively and efficiently. Projects which integrate the project management processes in their management are strategically aligned to the organization's vision and serve the needs of all the stakeholders.

2.2.5 Project management knowledge areas and processes. A Project Management Process Group is a logical grouping of project management processes to achieve specific project objectives. Process Groups are independent of project phases. Project management processes are grouped into the following five Project Management Process Groups:

- Initiating Process Group. Those processes are performed to define a new project or a new phase of an existing project by obtaining authorization to start the project or phase.
- Planning Process Group. Those processes required to establish the scope of the project, refine the objectives, and define the course of action required to attain the objectives that the project was undertaken to achieve.
- Executing Process Group. Those processes were performed to complete the work defined in the project management plan to satisfy the project requirements.
- Monitoring and Controlling Process Group. Those processes required to track, review, and regulate the progress and performance of the project; identify any areas in which changes to the plan are required; and initiate the corresponding changes.
- Closing Process Group. Those processes are performed to formally complete or close the project, phase, or contract.

As depicted in Figure 5, the process management process groups are independent of project phases.

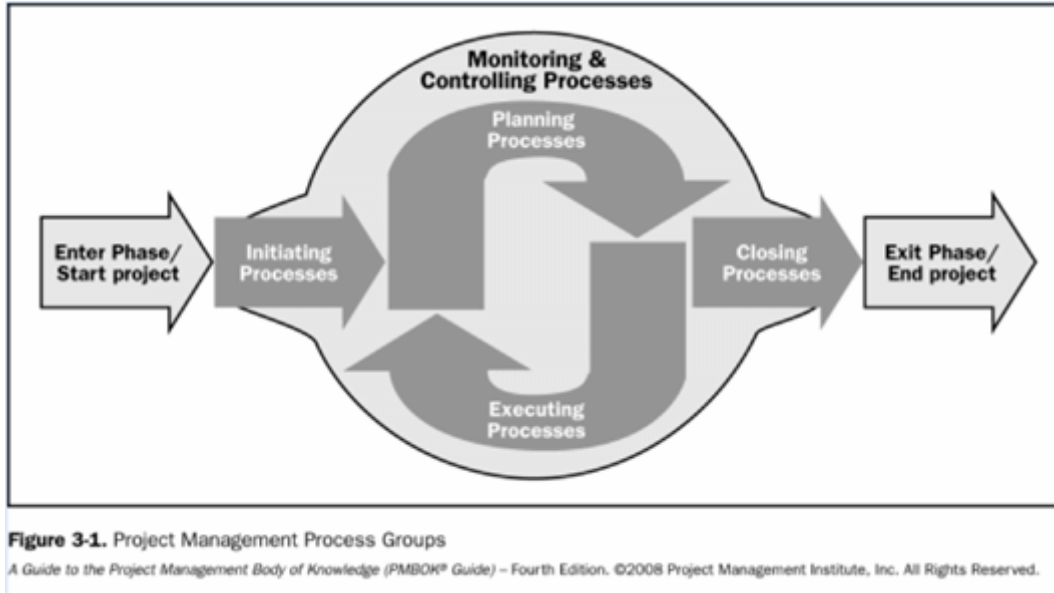


Figure 5. Project Management Process Groups. Copyright, 1996 PMI PMBOK Guide Fourth Edition

The ten project management knowledge areas as extracted from the PMBOK Guide

® sixth edition are as follows:

- **Project Integration Management.** Includes the processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process Groups.
- **Project Scope Management.** Includes the processes required to ensure the project includes all the work required, and only the work required, to complete the project successfully.
- **Project Schedule Management.** Includes the processes required to manage the timely completion of the project.

- **Project Cost Management.** Includes the processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so the project can be completed within the approved budget.
- **Project Quality Management.** Includes the processes for incorporating the organization's quality policy regarding planning, managing, and controlling project and product quality requirements, to meet stakeholders' expectations.
- **Project Resource Management.** Includes the processes to identify, acquire, and manage the resources needed for the successful completion of the project.
- **Project Communications Management.** Includes the processes required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and ultimate disposition of project information.
- **Project Risk Management.** Includes the processes of conducting risk management planning, identification, analysis, response planning, response implementation, and monitoring risk on a project.
- **Project Procurement Management.** Includes the processes necessary to purchase or acquire products, services, or results needed from outside the project team.
- **Project Stakeholder Management.** Includes the processes required to identify the people, groups, or organizations that could impact or be

impacted by the project, to analyze stakeholder expectations and their impact on the project, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.

The Ten Knowledge areas and process groups are mapped in Figure 6 below.

Table 1-4. Project Management Process Group and Knowledge Area Mapping

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring and Controlling Process Group	Closing Process Group
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work 4.4 Manage Project Knowledge	4.5 Monitor and Control Project Work 4.6 Perform Integrated Change Control	4.7 Close Project or Phase
5. Project Scope Management		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
6. Project Schedule Management		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Durations 6.5 Develop Schedule		6.6 Control Schedule	
7. Project Cost Management		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	
8. Project Quality Management		8.1 Plan Quality Management	8.2 Manage Quality	8.3 Control Quality	
9. Project Resource Management		9.1 Plan Resource Management 9.2 Estimate Activity Resources	9.3 Acquire Resources 9.4 Develop Team 9.5 Manage Team	9.6 Control Resources	
10. Project Communications Management		10.1 Plan Communications Management	10.2 Manage Communications	10.3 Monitor Communications	
11. Project Risk Management		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses	11.6 Implement Risk Responses	11.7 Monitor Risks	
12. Project Procurement Management		12.1 Plan Procurement Management	12.2 Conduct Procurements	12.3 Control Procurements	
13. Project Stakeholder Management	13.1 Identify Stakeholders	13.2 Plan Stakeholder Engagement	13.3 Manage Stakeholder Engagement	13.4 Monitor Stakeholder Engagement	

Figure 6. Project Management Process Group and Knowledge Area Mapping. Copyright, 2017 PMI PMBOK Guide, p25

2.2.6 Project life cycle. The project life cycle is a series of phases that a project passes through from its inception to its completion (PMBOK, 2017). The life cycle of the project begins with starting the project, followed by Organizing and preparing, carrying out the work

and completing the project. According to the PMBOK Guide®, the phases may be sequential, iterative, or overlapping.

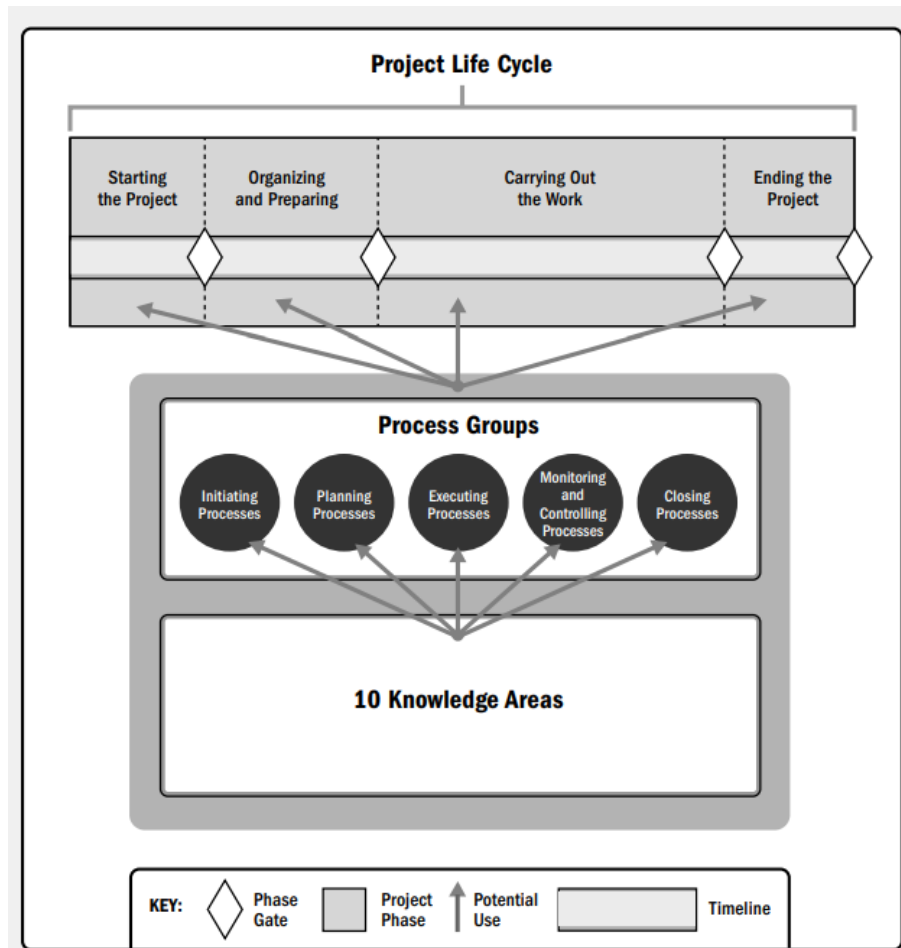


Figure 7. Interrelationship of PMBOK Guide Key Components in Projects. Copyright 2017, PMBOK Guide, 6th Edition p.18

The project life cycle provides project managers with a pathway throughout projects. It defines where to start, and where to go next at each stage in the project. (Aston, 2022)

The project lifecycle can be predictive or adaptive. The lifecycle for the development of the FGP will be completed using the hybrid life cycle as some of the concepts of the

communication campaign are still under development. This information will be useful in the formulation of the various plans of the FGP.

2.2.7 Company strategy, portfolios, programs, and projects. Patrick Weaver, PMP Director of Mosaic Project Services Pty Ltd differentiates between program management and project management in a way that is easy to understand. According to Weaver, Program management is about maximizing the benefits realized with constrained resources in a changing environment. Project management is focused on the efficient creation of a defined deliverable (e.g., rebuilding a school) (Weaver, 2010). Santiago (Santiago, 2022), further states that, “Program management entails maintaining a strategic plan and scheduling multiple different projects to help the organization achieve its goals.”

The four strategic priorities of the MoECST are outlined in the BES Plan 2021-2025. These include: 1. Reforming the System of Education, 2. Transforming Teaching and Learning, 3. Prioritizing Underserved Sectors and 4. Maximizing Human Capital (BES Plan, 2021). The PEU is responsible for the execution of programs within the MoECST. The unit, however, has been functioning primarily to execute the projects that the ministry has funded through the CDB or the IDB. The CDB has funded the Belize Education Sector Reform Program Phase II which aims at increasing access to quality education by building twenty-seven new schools and carrying out four consultancies. This program was paused to ensure it was in alignment with the vision of the BES Plan. The program is set to be relaunched in March of this year.

The IDB funded the Education Quality Improvement Program Phase II (EQIP II) to increase access to quality education with an emphasis to STEAM subjects and a special

emphasis to educating girls and migrant students. This is the most active program that the unit is managing. The main project is the infrastructure component, a state-of-the-art secondary school facility with a total value of BZ\$ 6.2M (Figure 5). Other consultancies involve the training of both primary and secondary level teachers in the teaching of STEAM related subjects and Individualized Program Planning. The FPG Project management plan for the Itz'at STEAM Academy Communication Campaign falls within this program.



Figure 8. Rendered image of the Main Courtyard looking North of the Itz'at STEAM Academy. Copyright 2012 by MoECST. Reproduced with permission.

In the upcoming months, the unit will manage a pipeline-project funded by Central American Bank of Economic Integration (CABEI) to create maker studios in primary schools to teach STEAM related subjects at this level. This will be a smaller endeavor with the consultants conducting the procurement of the equipment that will be required for the training workshops.

Currently there are plans to create the post of a program coordinator to manage and ensure the effects of the program are sustained beyond the end date of the project. The vision of the Minister is to strategically align programs that are piloted within grant facilities to ensure that STEAM related subjects are taught throughout all levels of Belize's education system.

2.3 Other applicable theory/concepts related to the project topic and context

A project plan is a series of formal documents that define the execution and control stages of a project. The plan includes considerations for risk management, resource management and communications, while also addressing scope, cost, and schedule baselines. Project planning software is used by project managers to ensure that their plans are thorough and robust. (Project Manager, 2023) Since the PEU does not currently use software to manage the projects, it will be important to identify software that can be incorporated as part of the Final Graduation Project (FGP).

A project is successful when it achieves its objectives and meets or exceeds the expectations of the stakeholders (Watt, 2014). The project team is also considered a stakeholder. Since the project team is comprised of personnel from different units in the Policy and Planning Division, they also need to be managed carefully. Interpersonal skills need to be developed for the team to improve synergy and to boost productivity. Watt suggests to:

- Involve team members in project planning.

- Arrange to meet privately and informally with each team member at several points in the project, for lunch or coffee.
- Be available to hear team members' concerns at any time.
- Encourage team members to pitch in and help others when needed.
- Complete a project performance review for team members.

2.3.1 Current situation of the problem or opportunity in study. As part of the EQIP II procurement plan, a consulting service was to be procured for the communication campaign for the new Itz'at STEAM Academy being established as part of the EQIP II program. The Ministry has determined that it can successfully implement the communication campaign using the ministry's resources. This approach will save substantial funds which can instead be used to fund operational equipment for the school itself. The team that has been identified to plan and execute the campaign includes the Press Officer, Project Coordinator, Finance Specialist, Administrative Assistant, Science and Technology Director and the National School Portal Coordinator. There was no formal project management documentation prepared for this subcomponent of the EQIP II program. The MoECST, through the PEU, will be responsible for coordinating the individual activities associated with the campaign. The FGP project management plan will create the plans to manage scope, schedule, cost, quality, resource, communication, change requests, risks, and procurement management required for future ventures like this project. The unit's administrative staff is familiar with some of these tools but does not practice using the tools as part of its daily operation.

2.3.2 Previous research done for the topic in study. As part of EQIP I, a consultancy for a communication campaign was procured. The report generated by that consultancy was used as a reference for the division of the scope of the Communication Plan for Itz'at STEAM Academy.

2.3.3 Other theory related to the topic in study. Theory of Constraints (TOC) is a new concept of project management. It has been effectively used in the manufacturing industry. Mishra's 2020 study explored the idea of how the TOC is applicable to improve the project performance dealing with time constraint. The five basic steps of TOC to remove the constraints are identifying the constraint, exploiting the constraint, subordinating to exploitation, elevating the system performance, and repeating process. Critical Chain Project Management (CCPM) approach has considered the human behavior factors like Parkinson's Law and student syndrome while rescheduling the project. Buffer Management was introduced while considering the human behavior factors for manipulating the activity duration to aggressive time estimates. Buffer Management uses the time buffers viz. Project Buffer and Feeding Buffers as well as Resource Buffers. These buffers signal the warning of its consumption as the activities are implemented and suggest to critically look at the processes without exceeding the project duration (Mishra, 2020).

3. Methodological Framework

Research methodology is the specific procedures or techniques used to identify, select, process, and analyze information about a topic. In a research paper, the methodology section allows the reader to critically evaluate a study's overall validity and reliability. (UWJ

Library, 2023) This section of the FGP differentiates between types of information sources, identifies the research method that will be used, tools, assumptions, constraints, and deliverables are explained in this section.

3.1 Information sources

Sources of information are often categorized as primary, secondary, or tertiary material. These classifications are based on the originality of the material and the proximity of the source or origin. This informs the reader as to whether the author is reporting information that is firsthand or second hand - conveying the experiences and opinions of others. (UMC Library staff, 2023)

3.1.1 Primary sources. These sources are records of events or evidence as first described or which happened without any interpretation or commentary. It is information that is shown for the first time or original materials on which another research is based. Primary sources display original thinking, report on new discoveries, or share fresh information. Examples of primary sources: Theses, dissertations, scholarly journal articles (research based), some government reports, symposia and conference proceedings, original artwork, poems, photographs, speeches, letters, memos, personal narratives, diaries, interviews, autobiographies, and correspondence. (UMC Library staff, 2023)

3.1.2 Secondary sources. These sources offer an analysis or restatement of primary sources. They often try to describe or explain primary sources. They tend to be works which summarize, interpret, reorganize, or otherwise provide an added value to a primary source. Examples of Secondary Sources: Textbooks, edited works, books, and articles that interpret

or review research works, histories, biographies, literary criticism and interpretation, reviews of law and legislation, political analyses, and commentaries. (UMC Library staff, 2023)

Table 1
Information sources (Sources, the author)

Objectives	Information sources	
	Primary	Secondary
To develop a project charter to define the key aspects of the communication campaign strategy required for implementation.	Kevin Chan Press Officer and team lead of campaign, PEU Communications Unit-interviews Allie, S. S. (2015). Project governance: #1 critical success factor.	<ul style="list-style-type: none"> ● Herald Media Ltd. Communication & Engagement Strategy, 2016
To develop a scope management plan to organize activities required into manageable phases for the execution of the communication campaign.	Kevin Chan Press Officer. Shakira Sharp, Diane Maheia-interviews	<ul style="list-style-type: none"> ● Herald Media Ltd. Communication & Engagement Strategy, 2016 ● PEU MoECST Program Operating Manual.
To elaborate a schedule management plan to ensure that all tasks are completed within the stringent period.	Indicate primary sources used for this objective. Shakira Sharp, Kevin Chen, John Newport-diaries, interviews, correspondence	<ul style="list-style-type: none"> ● Herald Media Partners Ltd. Project Report Teacher Recruitment Campaign. EQIP II 2017 ● PEU MoECST Annual Operating Plan

Objectives	Information sources	
	Primary	Secondary
	Clayton, M. (Presenter). (2021, Oct 13). How to Create a Work Breakdown Structure	<ul style="list-style-type: none"> Practice Standard for Scheduling - Third Edition (2019).
To develop a cost management plan to estimate the funds required for the different activities of the campaign.	Hilma Link-Chan, Christina Lundsten, Christine King-interviews, correspondence	<ul style="list-style-type: none"> PEU MoECST Procurement Plan 2022
To generate a quality management plan to define the specifications required for goods or non-consulting services to be procured as part of the campaign.	Kevin Chan, Diane Maheia, Emma Naslund-Hadley-interviews	<ul style="list-style-type: none"> Herald Media Partners Ltd. Project Report Teacher Recruitment Campaign. EQIP II 2017
To outline a resource management plan to indicate the resources that will be used to implement the campaign.	Hilma Chan-Link, Interview	<ul style="list-style-type: none"> PEU MoECST Program Operating Manual.
To outline a communication management plan to relay timely and efficient messages among team members and stakeholders.	Shakira Sharp, Kevin Chen <i>Project Management Communication Plan.</i> (2021).	<ul style="list-style-type: none"> Herald Media Ltd. Communication & Engagement Strategy, 2016
To formulate a risk management plan to	Emma Naslund-Hadley, Kevin Chen, Hilma Chan-Link	<ul style="list-style-type: none"> Herald Media Partners Ltd. Project Report

Objectives	Information sources	
	Primary	Secondary
minimize risks related to the project.		Teacher Recruitment Campaign. EQIP II 2017
To propose a procurement management plan to identify the procurement method to source resources as defined by thresholds set by the funding agent.	<p>Hilma Chan-Link, Christian Lungsten, Christine King- interviews</p> <p>Inter-American Development Bank. (2021)</p> <p>Thresholds for processes with International Competitive Bidding, National Competitive Bidding and Price Comparison. Policies for the Procurement of Goods and Works financed by the Inter-American Development Bank <i>GN-2349-9</i>. (2011).</p>	<ul style="list-style-type: none"> • PEU MoECST Program Operating Manual.
To develop a stakeholder management plan to engage all the necessary stakeholders in creating and executing the communication plan for the Itz'at STEAM Academy.	<p>Emma Naslund-Hadley, Diane Maheia, John Newport, Kevin Chen.</p> <p>Fair-Wright, C. & Juli, T. (2016). <i>Overcoming stakeholder resistance through dialogue.</i></p>	<ul style="list-style-type: none"> • Herald Media Ltd. Communication & Engagement Strategy, 2016

3.2 Research methods

Research is a systematic investigation that should generate a specific body of knowledge that will add to accepted facts and perceived concepts. Research should not be limited to a literature review. Research methods are the strategies, processes or techniques utilized in the collection of data or evidence for analysis to uncover new information or create better understanding of a topic. (New Castle Library, 2023) Research methods vary depending on the type of research that is conducted. The types of research are either Qualitative, Quantitative or a combination of both. Qualitative research is descriptive in nature and is used to gather data about experiences of individuals on the “how’s” or “whys” of an event. Quantitative data gathers numerical data that can be statistically analyzed. It is used to uncover patterns in the data that can be used to generalize. This type of research can identify trends and projections. It investigates the relationship between variables and tests the effectiveness of a treatment program or product. Each type of research used will determine the techniques or tools that will be used to capture the data. The research method will also vary depending on the data that is available, and the people involved in the process. Analytical, inductive and synthesis research methods will be used for the development of the FGP. See chart 2.

3.2.1 Analytical method. This type of research is based on the use of facts or information already available. The data is analyzed to make a critical evaluation of the material (Writer, 2020). Within analytical research articles, data and other key facts that pertain to a project are compiled; after the information is collected and evaluated, the sources are used to prove a hypothesis or support an idea. Using critical thinking skills, minute details

of the research are used to form greater assumptions about the material. A hypothesis, made based on evidence, is generated at the start of using this method (Oxford University Press, n.d.). During the investigation, the data gathered is evaluated and the conclusion of the study either supports or rejects the hypothesis. During the development of the FGP the research hypothesis created in the project charter will guide the investigation.

3.2.2 Synthesis research. This method collects primary data for a qualitative purpose. The objective of this type of method is to gain more in-depth understanding of a topic (Wyborn et al., 2018). During this process, structured interviews can be used as a data collection method that relies on asking questions in a set order to collect data on a topic. It is one of four types of interviews.

Structured interviews are best used when there is a noticeably clear understanding of the topic. The baseline is used to design strong structured questions. These types of interviews are also necessary when there are time or resource constraints. A structured interview is straightforward to conduct and analyze. Asking the same set of questions mitigates potential biases and leads to fewer ambiguities in analysis. It is an undertaking you can likely handle as an individual, provided you remain organized (Merkus, 2022).

Table 2

Research Methods. (Source: The Author)

Objectives	Qualitative	Quantitative	Analytic
To develop a project charter to define the key aspects of the communication	Conduct interviews to gather information	N/A	Identify Milestones for a

Objectives	Qualitative	Quantitative	Analytic
campaign strategy required for implementation.	from stakeholders on the needs of the communication campaign.		Communication Campaign.
To develop a scope management plan to organize activities required into manageable phases for the execution of the communication campaign.	Interview Press Officer to identify the activities that will be included in the campaign.	Collect Quotations for the different goods or services to be used.	Based on the budget for the activity determine the scope of the campaign.
To elaborate a schedule management plan to ensure that all tasks are completed within the stringent time frame.	Conduct interviews to gather information from stakeholders on the needs of the communication campaign.		Based on the Procurement plan, the PEU's Annual Operating Plan and the Academic Calendar determine the timeline for the execution of the plan.
To develop a cost management plan to estimate the funds required for the different activities of the campaign.	Interview the Financial Specialist to identify the procedure for	N/A	Price Comparison and budget estimates will be used to

Objectives	Qualitative	Quantitative	Analytic
	approvals for payments.		manage the cost of the campaign.
To generate a quality management plan to define the specifications required for goods or non-consulting services to be procured as part of the campaign.	Internal communication and interviews to determine the acceptable quality of goods and services.	N/A	Reference the Brand guidelines of the use of the Proprietary material of the MoECST and Itz'at Academy.
To outline a resource management plan to indicate the resources that will be used to implement the campaign.	Interview Financial Specialist to gather information on the payment of stipend.	Create schedule of hours dedicated to the different activities in determining overtime for Office Driver.	N/A
To outline a communication management plan to relay timely and efficient messages among team members and stakeholders.	Survey, Interviews to determine the most suitable method of communication and establish meeting dates and time.	N/A	Consult the Communication Plan of MoECST to identify established protocols and norms.

Objectives	Qualitative	Quantitative	Analytic
To formulate a risk management plan to minimize risks related to the project.	Brainstorm with the PEU team to identify risks associated with the communication campaign.	N/A	Communication Plan of MoECST to identify Crisis Management Plan.
To propose a procurement management plan to identify the procurement method to source resources as defined by thresholds set by the funding agent.	Consult with Procurement Specialist from MoECST and IDB to determine next steps of the procurement method.	N/A	Consult with the IDB Procurement Policies and Thresholds to determine procurement method. Reference the PEU POM.
To develop a stakeholder management plan to engage all the necessary stakeholders in creating and executing the communication plan for the Itz'at STEAM Academy.	Survey stakeholders to identify the expectation.	N/A	Reference the Stakeholder matrix to determine the level of engagement for each stakeholder.

3.3 Tools

Tools is defined as, “Something tangible, such as a template or software program, used in performing an activity to produce a product or result.” For each area of the project management plan there are several prescribed tools within the PMBOK Guide®. The tools can be used for multiple areas within the plan. Meetings are the most common tool. One must be careful not to schedule meetings that are too lengthy, or schedule them too frequently.

Table 3

Tools to be used for the FGP. (Source, the Author)

Objectives	Tools
To develop a project charter to define the key aspects of the communication campaign strategy required for implementation.	Brainstorming Checklists Focus groups. interviews
To develop a scope management plan to organize activities required into manageable phases for the execution of the communication campaign.	Expert judgement Decision making WBS decomposition Product analysis
To elaborate a schedule management plan to ensure that all tasks are completed within the stringent time frame.	Project management information system Meetings Dependency determination Critical path method Schedule compression

Objectives	Tools
To develop a cost management plan to estimate the funds required for the different activities of the campaign.	Knowledge management Decision making Cost aggregation Historical information review Funding limit reconciliation
To generate a quality management plan to define the specifications required for goods or non-consulting services to be procured as part of the campaign.	Inspection checklist Expert judgement Problem solving
To outline a resource management plan to indicate the resources that will be used to implement the campaign.	Conflict management Meeting management PMI, meetings, data analysis, Interpersonal and team skills. negotiation
To outline a communication management plan to relay timely and efficient messages among team members and stakeholders.	Active listening Facilitation Decision making
To formulate a risk management plan to minimize risks related to the project.	Expert judgement brainstorming Checklist meetings

Objectives	Tools
To propose a procurement management plan to identify the procurement method to source resources as defined by thresholds set by the funding agent.	Expert judgement Advertising Data analysis. Interpersonal team skills
To develop a stakeholder management plan to engage all the necessary stakeholders in creating and executing the communication plan for the Itz’at STEAM Academy.	Active listening/ communication skills, Ground rules, meeting Networking Political awareness

3.4 Assumptions and constraints

The PMBOK Guide 6th edition defines an assumption as, “A factor in the planning process that is considered to be true, real or certain, without proof or demonstration.” Additionally, it defines constraint as, “a limiting factor that affects the execution of a project.” A constraint will limit time, schedule, resources, cost, or scope.

Table 4*Assumptions and Constraints. (Source, the Author)*

Objectives	Assumptions	Constraints
To develop a project charter to define the key aspects of the communication campaign strategy required for implementation.	Information about the Communication Campaign is organized and available.	The Itz'at classes will commence September 2023. The policies of the school need to be established before the communication campaign can begin. Policies are still under development.
To develop a scope management plan to organize activities required into manageable phases for the execution of the communication campaign.	to ensure alignment with organizational processes.	Time will determine how much can be done within the brief time span.

Objectives	Assumptions	Constraints
To elaborate a schedule management plan to ensure that all tasks are completed within the stringent time frame.	The project's critical path can be monitored using MS Projects.	Cost and time. People may not be available after working hours since they are not going to be paid overtime.
To develop a cost management plan to estimate the funds required for the different activities of the campaign.	Projects funds will be used for the development of the campaign.	The bank procurement plan and policies need to be followed.
To generate a quality management plan to define the specifications required for goods or non-consulting services to be procured as part of the campaign.	A technical revision of the plans and reports will be done.	Cost is a constraint. The MoECST does not want to spend frivolously on the overall campaign. Additionally, the Press Officer has the responsibility to prove all material that contains the MoECST logo. This may cause some delays.

Objectives	Assumptions	Constraints
To outline a resource management plan to indicate the resources that will be used to implement the campaign.	Personnel at the Ministry of Education, Culture, Science and Technology will collaborate in the development of the plans. No additional expense will be incurred.	There is no one fully assigned to this project. Team members need to complete additional duties along with the Itz’at communication campaign. This may cause some delays if they cannot allocate sufficient time to the communication campaign.
To outline a communication management plan to relay timely and efficient messages among team members and stakeholders.	There will be no limitation to use the information provided in the Communication Plan for Itz’at STEAM Academy.	Location is a constraint. School administrators are stationed in Belize City; however, majority of the committee are in Belmopan.
To formulate a risk management plan to minimize risks related to the project.	It is assumed that the manuals created will not generate any negative public backlash.	Risks can be costly since it may cause delays.

Objectives	Assumptions	Constraints
<p>To propose a procurement management plan to identify the procurement method to source resources as defined by thresholds set by the funding agent.</p>	<p>The project management plans will align with the project management responsibilities and the program operational manual acceptable to the Financing Agent.</p>	<p>Bank policy must be followed.</p>
<p>To develop a stakeholder management plan to engage all the necessary stakeholders in creating and executing the communication plan for the Itz’at STEAM Academy.</p>	<p>There will be no limitation to use the information provided in the Communication Plan for Itz’at STEAM Academy.</p>	<p>The school administrators have a high interest but low power. This indicates that they do not make the final decision involving any project activity. They can share inputs and concerns, however, MoECST has the final say.</p>

3.5 Deliverables

The PMBOK Guide 6th edition states that a deliverable is, “any unique and verifiable product, result, or capacity to perform a service that is required to be produced to complete a process, phase, or project. They are tangible components. Project deliverables are outputs that are associated with project objectives (Donato, 2022). According to Donato (2022), the successful submission of a project deliverable is a byproduct of the proper execution of project milestones. She further identified the benefits of effectively identifying deliverables as:

- accurate estimates on scope, timeline, and budget
- allows the team to work independently.
- improved understanding of the goals of the project
- aligned expectations among stakeholders.
- improved trust between project team and stakeholders
- raised team morale through visible progress.

*Table 5**Deliverables by Objectives (Source, the Author)*

Objectives	Deliverables
To develop a project charter to define the key aspects of the communication campaign strategy required for implementation.	A Communication Campaign Strategy Report (Project Plan) will be created and presented to the sponsor and committee.
To develop a scope management plan to organize activities required into manageable phases for the execution of the communication campaign.	Work Breakdown Structure- will identify what activities are in scope and which are not. 100% rule will be followed.
To elaborate a schedule management plan to ensure that all tasks are completed within the stringent time frame.	Milestone list- shared document that will be used to create reminders for team members.
To develop a cost management plan to estimate the funds required for the different activities of the campaign.	Draft Budget- used to estimate the cost of the different subcomponents for the campaign.
To generate a quality management plan to define the specifications required for goods or non-consulting services to be procured as part of the campaign.	A RACI Chart will be drafted so that all components of the project are assigned to someone who is responsible for vetting the quality produced.

Objectives	Deliverables
To outline a resource management plan to indicate the resources that will be used to implement the campaign.	Shared Calendar to coordinate different meetings.
To outline a communication management plan to relay timely and efficient messages among team members and stakeholders.	Create calendar invites to meetings so that it may appear on the individual calendars. Define Email and chat protocol.
To formulate a risk management plan to minimize risks related to the project.	Risk Matrix- to identify risks and mitigating action plan
To propose a procurement management plan to identify the procurement method to source resources as defined by thresholds set by the funding agent.	Get quotations for services or goods. Use the shopping method or National competitive bidding process for procurement.
To develop a stakeholder management plan to engage all the necessary stakeholders in creating and executing the communication plan for the Itz'at STEAM Academy.	Engagement Strategy Report, Stakeholder mapping exercise.

4. RESULTS

4.1. Outline proper project management processes and integration of knowledge areas in the development of the project management plan for the Itz'at STEAM Academy

Communication Project

PMI PMBOK divides the knowledge area of project integration management into six processes and is described as, “the processes and activities to identify, define, combine, unify and co-ordinate the various processes and project management activities within the Project Management Process Groups” (PMBOK® Guide, Project Management Institute, 2017, p.69)

The processes include developing a project charter from the initiating process group, developing a project management plan from the planning process group, directing and managing a project work from the executing process group, monitoring and controlling project work performing integrated change control from the monitoring and controlling process group, and closing the project or phase from the closing process group.

The following will address the development of a project management plan and will further examine the processes of project integration management and how it will be undertaken for the Communication Campaign Strategy for the Itz'at STEAM Academy project, using the approach in the project management plan.

4.1.1 Develop Project Charter. This process is defined as, “the process of developing a document that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities” (PMBOK® Guide, Project Management Institute, 2017, p.75). Because funding will be sourced from an international funding agency, the charter will be prepared with flexible dates and finalized when the bank’s ‘no objection’ has been obtained.

The project Charter can be found as Appendix 1.

4.1.2 Develop Project Management Plan. The Develop Project Management Plan process is defined as “the process of defining, preparing and coordinating all subsidiary plans and integrating them into a comprehensive project management plan” (PMBOK® Guide, Project Management Institute, 2017, p.82). The Project Management Plan for the Communication Strategy for the Itz’at STEAM Academy Project represents a holistic approach to implementation and will outline the subsidiary plans that will be used based on the needs of the project. The project management plan is as follows:

PROJECT LIFE CYCLE

Table 6
Project deliverables per project phase. (Source: Author)

PHASES	DELIVERABLES
PRE-CAMPAIGN PHASE	Development of Communication Campaign strategy.
	Design logo, slogan, and QR Codes.
	Establish brand guidelines
	Establish School Contact information
	Establish School Website
	Identify Media Team
	Schedule Media Rounds and School visits

PHASES	DELIVERABLES
INNER-CITY CAMPAIGN PHASE	Distribute Printable material
	Conduct Media rounds
	Conduct School visits within City limits
NATIONAL CAMPAIGN PHASE	Distribute Printable material in six districts.
	Conduct STEAM Workshops
	Roll out Scavenger hunt
POST-CAMPAIGN PHASE	150 Students registered at Itz'at STEAM Academy
	Register Lessons learnt
	Final Report

4.1.2.1 Develop project management plan: tools and techniques. Project Management Processes and tailoring decisions can be summarized in Table 7.

Table 7
Project Management Knowledge Areas Processes and Tailoring Decisions. (Source: PMBOK 6th Edition)

Knowledge Area	Processes	Tailoring Decisions
Integration	Develop Project Charter Develop Project Management Plan Direct and Manage Project Work Manage Project Knowledge Monitor and control Project work. Perform Integrated Change Control Close Project or Phase	The project has a four-phased life cycle. The span of the first phase will be longer than the others. The phases will be controlled by the availability of the schools to accommodate the campaign visits.
Scope	Plan Scope Management Collect Requirements Define Scope Create WBS	The scope of the project is detailed, as activities must be done efficiently and speedily to be able to compete with the other high schools in the area to attract students for registration. The WBS is broken down into phases and is further decomposed

Knowledge Area	Processes	Tailoring Decisions
	Validate Scope Control Scope	into activities.
Schedule	Plan Schedule Management Define Activities Sequence Activities Estimate Activity Resources Estimate Activity Durations Develop Schedule Control Schedule	Project management software will not be used to determine the outputs of the various time processes. Organizational process assets in the form of a time management matrix will be used to determine the description of activities, its sequence, resources, durations, and schedule
Cost	Plan Cost Management Estimate Costs Determine Budget Control Costs	Funding will be provided by the EQIP II Project funds.

Knowledge Area	Processes	Tailoring Decisions
Quality	Plan Quality Perform Quality Assurance Control Quality	Quality is important throughout all phases of the project.
Resource	Plan Human Resource Management Acquire Project Team Develop Project Team Manage Project Team	The project team will be comprised of Ministry personnel who will be dedicated to this on a part-time or needs basis. There will be no full-time dedicated team to the campaign. The faculty of the Itz'at STEAM Academy will conduct the media and school visits.
Communications	Plan Communications Manage Communications Control Communications	Communication will be monitored using primarily email and a WhatsApp group to hold each member accountable.
Risk	Plan Risk Management Identify Risks	The Communication Crisis Plan of the Ministry will be relied on. Negative publicity will be carefully monitored, and action

Knowledge Area	Processes	Tailoring Decisions
	Perform Qualitative Risk Analysis Plan Risk Response Control Risks	will be taken accordingly.
Procurement	Plan Procurement Management Conduct Procurements Control Procurements Close Procurements	The ex-ante revision of all procurement needs to be considered especially in the timeline for the consumables used in the campaign. The Bank's procurement policy prevails.
Stakeholder	Identify Stakeholders Plan Stakeholder Management Manage Stakeholder Engagement Control Stakeholder Engagement	Stakeholders are adequately identified under the project and the many ways to communicate and work with them is monitored throughout the life of the project.

PROCESS TOOLS AND TECHNIQUES

Table 8

Tools and Techniques by Project Management Knowledge Area. (Source: PMBOK 6th Edition)

Knowledge Area	Tools and Techniques
Integration	Expert judgment
Scope	Expert judgment, decomposition, review, and inspection
Schedule	Expert judgment, decomposition, dependency determination, basic scheduling tool
Cost	Analytical techniques will be sought for elements in the cost management plan for e.g., choosing the option to fund the project Budget spreadsheets, Bottom-up estimating expert judgment
Quality	Quality audits, inspection, reviews
Human Resource	Organizational charts, acquisition, team-building activities
Communication	Communications requirements matrix

Knowledge Area	Tools and Techniques
Procurement	Expert judgment, inspection
Risk	Brainstorming, expert judgment, checklist analysis, probability, and impact matrix
Stakeholders	Stakeholder engagement assessment matrix, expert judgment, communications methods

4.2. Develop a scope management plan to describe how the project scope will be defined, developed, monitored, controlled, and verified

PMI PMBOK divides the knowledge area of Project Scope Management into six processes and is described as “the processes required to ensure that the project includes all the work required and only the work required, to complete the project successfully” (PMBOK® Guide, Project Management Institute, 2017, p.129). The processes include plan scope management, collect requirements, defining scope and creating WBS, which all form part of the planning process group, in addition to validate and control scope, which form part of the monitoring and controlling process group.

4.2.1 Plan Scope Management. Project Scope Management includes the process required to ensure the project includes all the work required, and only the work required, to complete the project successfully (PMBOK® Guide, Project Management Institute, 2017, p.129). By managing what is and is not included in the project, the team will be able to stay on schedule and within budget.

4.2.2 Collect Requirements. In this process, the stakeholder needs and requirements to meet the project objectives are determined, documented, and managed. It is important to identify the needs since meeting the needs at the end of the project will determine the stakeholder’s satisfaction of the project. The project charter and the stakeholder register are two important documents that will inform this process. Stakeholder input and involvement in the identification of the requirements is paramount to the success of a project therefore input from the sponsor, project team, staff, senior management team and the consultants developing the curriculum of the school will be sought. A list of project requirements is listed below:

Table 9**ISA Project Requirements. (Source: Author)**

ID	Requirement Description	Rationale for Inclusion
01	The campaign should create a Belizean identity for the school.	A first-of-its-kind school in Belize should reflect the people it will serve. It denotes ownership of the project.
02	Internal communication within the Ministry should be prioritized so that Ministry Personnel can assist to answer questions about the Government High School that is being promoted.	Parents may ask ministry personnel for more information. Trust will be forged in the institution if GOB personnel can discuss the concept of the new school.
03	The campaign should highlight the distinct and novel approach to the pedagogy that will be implemented in the school.	This is what distinguishes the Itz'at STEAM Academy from the thirteen other Belize City high schools.

04	Target both parents and students of STD V- STD VII.	The campaign should target the younger students and their parents to gather interest in the school from early on.
05	The campaign should target marginalized communities as well as well-off communities	The school is not an elitist school. Both southside and northside students should be targeted.
06	Primarily focus efforts within a 10-mile radius surrounding the school.	This is one of the eligibility criteria for the school. Students who live in closer proximity to the school are preferred.
07	The campaign will form part of a larger National STEAM Campaign and will require participation of the media team and other faculty members	This will be as a form of publicity only and not for recruitment purposes.
08	The campaign should engage students in a non-traditional approach since the school itself is non-traditional.	Being that the school is different, the school visits should be different. The

		school visits should have a hands-on approach and use engaging tactics to get students to apply to the school.
09	The campaign should be environmentally conscious and limit the paper-based promotional paraphernalia. Any printed material should serve multiple purposes.	Using social media and QR-Codes, information about the school and even the application and registration forms will be submitted online. The school also will have a WhatsApp number for easier access to information.
10	Administrative and financial guidelines of the funding agency must be adhered to	A mandatory requirement from the funding agency.

4.2.3 Define scope. The detailed description of the project and the product is established during this process. For the Communication Campaign Strategy for the Itz’at STEAM Academy, it is crucial to make a distinction between what activities will be funded for the campaign itself. Funds are not to be used for activities outside of the scope of the project. It is important to

demarcate where the activities are crossing boundaries into the operational expenses of the school itself. For instance, yard maintenance for photoshoot and the telephone bill should be covered using the school budget and not the communication campaign funds. Those activities are outside of the scope of the project.

The scope is also defined by the project scope statement and the work breakdown structure (WBS) and its dictionary. Here the documentation of all the work required to complete the project will be provided. The project sponsor, director and the project management team will be primarily responsible for managing the project scope.

4.2.3.1 Project scope statement. The process for developing a project scope statement involves the development of a detailed project scope description, the project deliverables, the acceptable criteria of these deliverables, any exclusions or work that is out of scope for the project and the project constraints and assumptions. With all these components included, a sound scope statement will be developed to provide the project management team and other stakeholders with a clear and mutual understanding of what the project is and what it will accomplish.

The Recruitment and Awareness Strategy found in Appendix 5 contains the details of the project scope.

4.2.4 Create Work Breakdown Structure (WBS). The WBS will be created from the detailed project scope statement and will represent all the work that is identified in the project scope statement, by breaking down the total scope of work to be undertaken, into more manageable parts. The logical grouping of the WBS will be arranged by phases to allow the project management team to easily schedule, understand, and implement logically related project activities. The WBS will be revisited as the project progresses for additions to be made, as required.

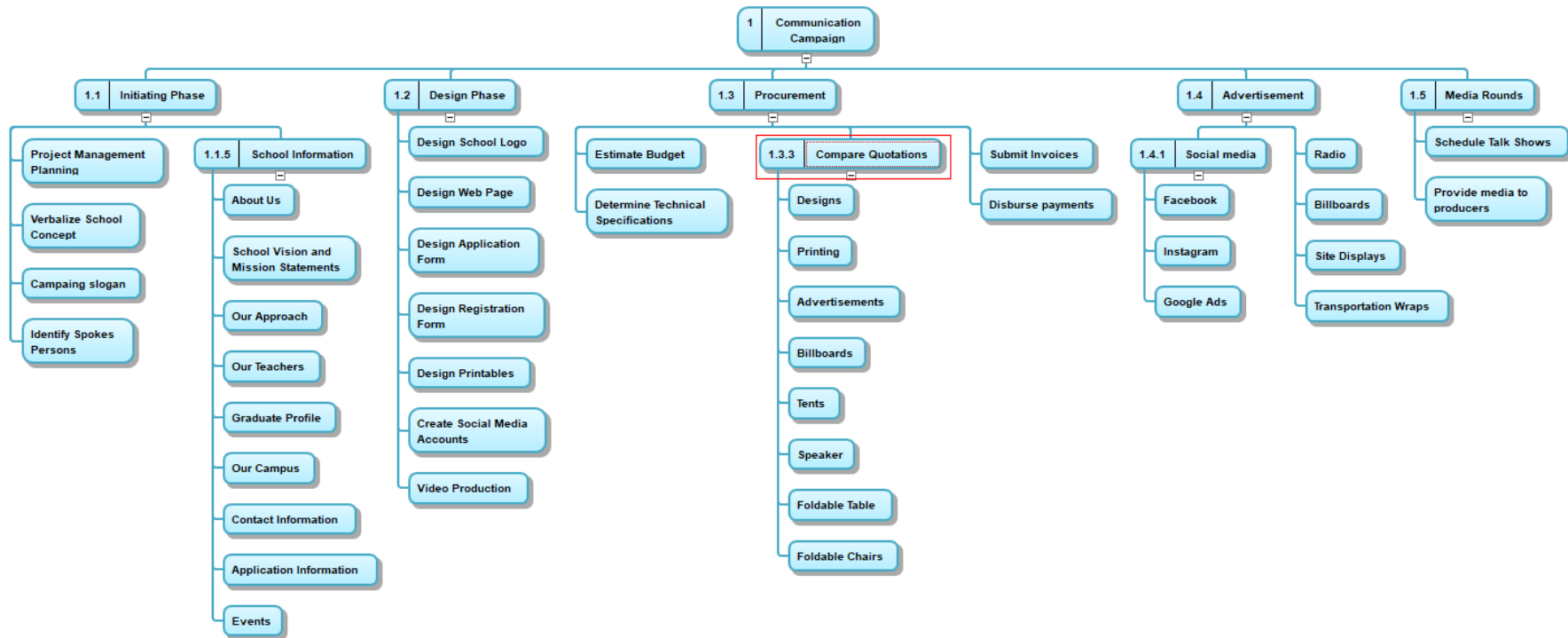


Figure 9. Work Breakdown Structure for Itz’at Communication Campaign. Source: Author

4.2.5 Validate scope. The process for validating scope, which is the formal acceptance of completed deliverables, will be done by the sponsor. The project manager will review all deliverables for compliance first, then, it will be forwarded to the senior project coordinator as an internal process of acceptance. After the senior project coordinator has ensured that all requirements are met, the director will then pass on deliverables to the sponsor for formal approval and sign-off.

Table 10

Deliverable Acceptance (Source: Author)

WBS CODE	DELIVERABLE	PLANNED DELIVERABLE DATE	ACTUAL DELIVERABLE DATE	VARIANCE

4.2.6 Control scope. “Control scope is the process of monitoring the status of the project and product scope and managing changes to the scope baseline” (PMBOK® Guide, Project Management Institute, 2017, p.167).

Inevitably, changes will occur; hence, the process to control scope must be outlined. The sponsor, senior project coordinator and project management team will work together to control the scope of the Itz'at communication Campaign. In addition, they can initiate changes to scope, if it is adequately justified. A change control system will be developed where a change request is made. This will be recorded, and then assessed by the senior project coordinator and manager. The assessment will examine the impact of the change on the

project, its objectives, and deliverables. Changes with a high impact must be presented to the sponsor. Approved changes will then be recorded, indicating when the date of approval was given and documenting the corrective action or changes that were made.

Table 11

Change Management Template (Source: Author)

TITLE OF CHANGE	DATE SUBMITTED	JUSTIFICATION	CHANGE IMPACT	PERSON REQUESTING CHANGE	ACTION TAKEN	APPROVED BY	DATE APPROVED

4.3. Develop a time management plan to determine the timely completion of the project

PMI PMBOK divides the knowledge area of Project Time Management into seven processes and is described as, “the processes required to manage the timely completion of the project” (PMBOK® Guide, Project Management Institute, 2017, p.173). The time management processes within the planning process group include plan schedule management, defining activities, sequence activities, estimate activity resources and durations and develop schedule. The monitoring and control process group is the final process of control schedule. The following will address the development of a schedule management plan and will further examine the processes of project time management and how it will be integrated and undertaken for the Itz’at STEAM Academy Communication Strategy Project, using the approach in the schedule management plan.

4.3.1 Plan Schedule Management. The process is defined as “the process for establishing the policies, procedures and documentation for planning, developing, managing and controlling the project schedule” (PMBOK® Guide, Project Management Institute, 2017, p.173). The output of this process is the Schedule Management Plan.

4.3.1.1 Schedule Management Plan. The scheduling management plan will include the scheduling tools to be used, the units of measure, scheduling information and reporting format and the processes for identifying activities, for scheduling activities estimating resources, estimating effort and duration and for updating, monitoring, and controlling schedule.

Scheduling tools: MS Project, MS Excel and expert judgment will be used for scheduling the project.

Unit of measure Hours will be the units of measure used.

Scheduling Information and Reporting Format: The schedule information required for the monthly status and final reports will include the project activities with an indication of the period or month in which it will materialize. The following template will capture the requirement and will be updated monthly for the report.

Table 12

Activity Schedule Update (Source: Itz’at Communication Strategy)

Activity	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Activity x						
Activity y						

The time management process will be managed and controlled by:

Activity identification: Activities will be identified from expert judgment and the decomposition of tasks undertaken in the work breakdown structure.

Activity Sequencing: the technique of discretionary dependency will be used to sequence the activities.

Estimating Resources: The type of resource and the quantity that is required to complete the activity will be provided from the pool of resources available to the project. the technique of expert judgment will be applied.

Estimating Effort and Duration: Bottom-up estimating and expert judgment will be used to estimate the effort and duration of the activities.

Develop Schedule: Activities will be scheduled in accordance with the order of months in which they should materialize. As the project management plan will be part of the dossier submitted to source funding, implementation dates must be established. The information will be presented in MS Excel with the corresponding months for implementation of activities highlighted accordingly.

Control Schedule: With any changes made to the schedule through the change control system the schedule management plan will be updated accordingly to reflect these changes.

4.3.2 Define activities. The define activities process is defined as, “the process of identifying and documenting the specific actions to be performed to produce project deliverables” (PMBOK® Guide, 50 Project Management Institute, 2017, p.173). The output of the define activities process is a milestone list as shown in Table 13. A milestone is

described as “a significant point or event in a project” (PMBOK® Guide, Project Management Institute, 2017, p.173).

Table 13

Milestone List (Source: Author)

Milestone	Date
Create Campaign logo start	Nov-3
Create Campaign logo end	Jan-26
Plan and Build SLS Website start	Jan-23
Plan and Build SLS Website end	Jan-27
Graphic Design start	Jan-23
Graphic Design end	Jan-27
Social media accounts created start	Jan-23
Social media accounts created end	Jan-27
Procurement of Printing start	Feb-23
Procurement of Printing end	Apr-23
Print Products start	Jan-23
Print Products start	Jan-27
Video Production and Audiovisual Production start	Jan-30
Video Production and Audiovisual Production end	Feb-24
Launch Media Campaign	Jan-27
Plan and Buy National Billboard Campaign, Print Campaign, TV/ Radio Campaign start	Feb-6

Plan and Buy National Billboard Campaign, Print Campaign, TV/ Radio Campaign end	Feb-20
School Visits start	Jan-30
School Visits end	Feb-28
Mid-term Report & Presentation	Apr-3
Execute Social Media Campaign start	Jan-27
Execute Social Media Campaign end	Sep-1
Submission of Final Report	Oct-6
Acceptance of Final Report	Oct-13

Table 14
Activity List (Acosta, Ingrid, 2023)

Activity (Level 1)	Activity (Level 2)	Activity (Level 3)	Activity (Level 4)	
Project Planning	Project Management Documents	Draft Project Documents		
		Project Document Approval		
		Develop TOR		
	Formulate Project Team	Identify team members	Kick off meeting	
Conceptual Design	School Identity	Establish Brand Kit	School Name	
			School Logo	
			School Colors	
		Campaign Slogan	Incorporate into Promotional items	
	Identify Spokes Person	Media Training		
	School Information	About Us		School Vision and Mission Statement
				Our Approach
				Our Teachers
		Graduate Profile		
		Our Campus	Pin on Google Maps	
		Application Information	Design Application forms	
		Events	Identify Key Events and Dates	
	Contact Us	Procure Phone numbers		
Design Execution	Website Development	Create webpages for school information	Design Layout	
			Select Images	
			Quality Inspection	
	Create links for application submission	Testing links		
	Procurement	Promotional items		Determine technical specifications
Launch Procurement Method				

Activity (Level 1)	Activity (Level 2)	Activity (Level 3)	Activity (Level 4)
			Award Contract
		Deliver Promotional Items	
		Videography	Schedule sessions
			Launch Procurement
			Shortlist firms
			Share concept design
			Shoot Video
			Approve Video Ad
		Advertisements, Billboards and Ads	Launch Procurement Method
			Share design
			Award contract
			Approve Draft
		Touring equipment	Confirm Installation
			Gather technical specifications
Launch Procurement Method			
Evaluate Bids			
Award Contract			
Social Media Account creation	Design pages	Deliver Equipment	
		Create QR-Codes	
		Link Pages to website	
Pre-Launch	Media Rounds	Schedule media shows	Circulate Social media pages
			Training of spokes person
			Share Media Presentation
			Distribute promotional items
	Social Media Campaign	Update social media pages	Launch Scavenger hunt
			Promote give-aways
			Update on School Events

Activity (Level 1)	Activity (Level 2)	Activity (Level 3)	Activity (Level 4)
	School visits	Schedule visits	Highlight due date for Registration
			STEAM Ambassadors
			STEAM Activities
			Distribute Application forms
Project Closeout & launching	School Inaguration	Plan event	Identify Date, time and Venue
			Draft Program
			Identify speakers
			Send invitations
			Invite Media
			Set up for the event
		Plan reception	Distribute refreshments
		Media Walk-through	clean up
	Press Release	News Interview	Collect video footage
	Launch of school year	Lesson Learnt preparation	Draft Press release
			Publish release
			Complete final report

4.3.3 Sequence activities. This process is defined as, “the process of identifying and documenting relationships among the project activities” (PMBOK® Guide, Project Management Institute, 2017, p.173). The sequence of activities will be determined by the technique and discretionary dependencies.

Discretionary dependencies are described as dependencies that are “established based on knowledge of the best practices within a particular application area or some unusual aspect of the project where a specific sequence is desired, even though there may be other acceptable sequences” (PMBOK® Guide, Project Management Institute, 2017, 51 p.158).

4.3.4 Estimate activity resources. According to PMBOK, estimate activity resources is defined as “the process of estimating the type and quantities of material, human resources, equipment or supplies required to perform each activity” (PMBOK® Guide, Project Management Institute, 2017, p.173). Expert judgment was used to determine the basic resources required to complete the activities.

4.3.5 Estimate activity durations. This process is described as the “process of estimating the number of work periods needed to complete individual activities with estimated resources” (PMBOK® Guide, Project Management Institute, 2017, p.173). The durations were determined using expert judgment.

4.3.6 Develop Schedule. The development schedule is described as, “the process of analyzing activity sequences, durations, resources requirements and schedule constraints to create the project schedule module” (PMBOK® Guide, Project Management Institute, 2017, p.173). The activities will be scheduled in accordance with the order of months in which they should materialize or be implemented.

Table 15
MS Project Schedule (Source: Author)

ID	Task Mode	WBS	Task Name	Duration	Start	Finish	Nov 20, '22
							S M T W T F S Nov
1		1	Project Planning	15 days?	Mon 11/21/22	Fri 12/9/22	
2		1.1	Project Management Documents	12 days	Mon 11/21/22	Tue 12/6/22	
3		1.1.1	Draft Project Documents	7 days	Mon 11/21/22	Tue 11/29/22	
4		1.1.2	Develop TOR for Consultancies	5 days	Wed 11/30/22	Tue 12/6/22	
5		1.1.3	Project Document Approval	0 days	Tue 12/6/22	Tue 12/6/22	
6		1.2	Formulate Project Team	3 days?	Wed 12/7/22	Fri 12/9/22	
7		1.2.1	Identify team members	3 days?	Wed 12/7/22	Fri 12/9/22	
8		1.2.1.1	Kick off meeting	1 day?	Wed 12/7/22	Wed 12/7/22	
9		1.2.1.2	Establish Team Charter	2 days	Thu 12/8/22	Fri 12/9/22	
10		2	Conceptual Design	60 days?	Mon 12/12/22	Fri 3/3/23	
11		2.1	Establish Brand Kit	37 days?	Mon 12/12/22	Tue 1/31/23	
12		2.1.1	School Identity	25 days	Mon 1/30/23	Fri 3/3/23	
13		2.1.1.1	School Name	10 days	Mon 1/30/23	Fri 2/10/23	
14		2.1.1.2	School Logo	10 days	Mon 2/13/23	Fri 2/24/23	
15		2.1.1.3	School Colors	5 days	Mon 2/27/23	Fri 3/3/23	
16		2.1.2	Campaign Slogan	10 days?	Mon 3/6/23	Fri 3/17/23	
17		2.1.2.1	Incorporate into Promotional items	1 day?	Mon 3/20/23	Mon 3/20/23	

Project: Communication Campa Date: Sat 7/1/23	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	
	Milestone		Duration-only		Deadline	
	Summary		Manual Summary Rollup		Progress	
	Project Summary		Manual Summary		Manual Progress	
	Inactive Task		Start-only			
	Inactive Milestone		Finish-only			

Page 1

ID	Task Mode	WBS	Task Name	Duration	Start	Finish	Nov 20, '22	Nov						
							S	M	T	W	T	F	S	S
18		2.1.3	Identify Spokes Person	2 days	Wed 3/15/23	Thu 3/16/23								
19		2.1.3.1	Media training	2 days	Wed 3/15/23	Thu 3/16/23								
20		2.2	School Information	7 days?	Mon 3/6/23	Tue 3/14/23								
21		2.2.1	About Us	3 days?	Mon 3/6/23	Wed 3/8/23								
22		2.2.1.1	School Vision and Mission Statement	1 day?	Thu 3/9/23	Thu 3/9/23								
23		2.2.1.2	Our Approach	1 day?	Fri 3/10/23	Fri 3/10/23								
24		2.2.1.3	Our Teachers	1 day?	Mon 3/13/23	Mon 3/13/23								
25		2.2.2	Graduate Profile	1 day?	Tue 3/14/23	Tue 3/14/23								
26		2.2.3	Our Campus	1 day?	Mon 3/6/23	Mon 3/6/23								
27		2.2.3.1	Pin on Google Maps	1 day?	Mon 3/6/23	Mon 3/6/23								
28		2.2.4	Application Information	2 days?	Thu 3/9/23	Fri 3/10/23								
29		2.2.4.1	Design Application Form	1 day?	Thu 3/9/23	Thu 3/9/23								
30		2.2.4.2	Establish Due date	1 day?	Fri 3/10/23	Fri 3/10/23								
31		2.2.5	Events	1 day?	Mon 3/13/23	Mon 3/13/23								
32		2.2.5.1	Identify Key events and dates	1 day?	Mon 3/13/23	Mon 3/13/23								
33		2.2.6	Contact us	1 day?	Mon 3/6/23	Mon 3/6/23								
34		2.2.6.1	Procure Phone numbers	1 day?	Mon 3/6/23	Mon 3/6/23								
35		3	Design Execution	40 days?	Thu 3/9/23	Wed 5/3/23								
36		3.1	Website Development	4 days?	Thu 3/9/23	Tue 3/14/23								
43		3.2	Procurement	33 days?	Thu 3/9/23	Mon 4/24/23								
67		3.3	Social Media Account Creation	3 days?	Wed 3/15/23	Fri 3/17/23								







Project: Communication Campa Date: Sat 7/1/23	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	
	Milestone		Duration-only		Deadline	
	Summary		Manual Summary Rollup		Progress	
	Project Summary		Manual Summary		Manual Progress	
	Inactive Task		Start-only			
	Inactive Milestone		Finish-only			




















Page 2

ID	Task Mode	WBS	Task Name	Duration	Start	Finish	Nov 20, '22							
							S	M	T	W	T	F	S	S
72		4	Pre-Launch	34 days?	Mon 3/20/23	Thu 5/4/23								
73		4.1	Media Rounds	4 days?	Mon 3/20/23	Thu 3/23/23								
79		4.2	Social Media Campaign	6 days?	Mon 3/20/23	Mon 3/27/23								
84		4.3	School visits	30 days?	Fri 3/24/23	Thu 5/4/23								
89		5	Project Closeout & launching	9 days?	Mon 7/3/23	Thu 7/13/23								
90		5.1	School Inaguration	40 days?	Mon 7/3/23	Mon 8/28/23								
91		5.1.1	Start of Academic Year	0 days	Mon 8/28/23	Mon 8/28/23								
92		5.1.2	Plan Event	12 days?	Mon 7/3/23	Tue 7/18/23								
93		5.1.2.1	Identify Date, time and venue	1 day?	Mon 7/3/23	Mon 7/3/23								
94		5.1.2.2	Draft Program	2 days	Tue 7/4/23	Wed 7/5/23								
95		5.1.2.3	Identify speakers	1 day?	Thu 7/6/23	Thu 7/6/23								
96		5.1.2.4	Send invitatins	5 days	Fri 7/7/23	Thu 7/13/23								
97		5.1.2.5	Invite Media	2 days	Fri 7/14/23	Mon 7/17/23								
98		5.1.2.6	Set up for the event	1 day	Tue 7/18/23	Tue 7/18/23								
99		5.1.3	Plan reception	2 days?	Mon 8/7/23	Tue 8/8/23								
100		5.1.3.1	Distribute refreshments	1 day?	Mon 8/7/23	Mon 8/7/23								
101		5.1.3.2	Clean up	1 day?	Mon 8/7/23	Mon 8/7/23								
102		5.1.4	Media walk-through	1 day?	Wed 7/19/23	Wed 7/19/23								
103		5.1.4.1	Collect video footage	1 day?	Wed 7/19/23	Wed 7/19/23								
104		5.2	Press Release	2 days?	Thu 7/20/23	Fri 7/21/23								
105		5.2.1	News Interview	2 days?	Thu 7/20/23	Fri 7/21/23								
106		5.2.1.1	Draft Press release	1 day?	Thu 7/20/23	Thu 7/20/23								
107		5.2.1.2	Publish release	1 day?	Fri 7/21/23	Fri 7/21/23								

Project: Communication Campa
Date: Sat 7/1/23

Task		Inactive Summary		External Tasks	
Split		Manual Task		External Milestone	
Milestone		Duration-only		Deadline	
Summary		Manual Summary Rollup		Progress	
Project Summary		Manual Summary		Manual Progress	
Inactive Task		Start-only			
Inactive Milestone		Finish-only			

ID	 Task Mode	WBS	Task Name	Duration	Start	Finish	Nov 20, '22	Nov
							S M T W T F S S	
108		5.3	Launch of school year	0 days?	Mon 8/28/23	Mon 8/28/23		
109		5.3.1	Lesson learnt preparation	2 days?	Mon 8/28/23	Tue 8/29/23		
110		5.3.1.1	Complete final report	1 day?	Mon 8/28/23	Mon 8/28/23		
111		5.3.1.2	Final Presentation	1 day?	Tue 8/29/23	Tue 8/29/23		
112		5.3.1.3	Close Project	0 days	Mon 8/28/23	Mon 8/28/23		

Project: Communication Campa Date: Sat 7/1/23	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	
	Milestone		Duration-only		Deadline	
	Summary		Manual Summary Rollup		Progress	
	Project Summary		Manual Summary		Manual Progress	
	Inactive Task		Start-only			
	Inactive Milestone		Finish-only			

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4.3.7 Control Schedule. The control schedule process is described as, “the process of monitoring the status of project activities to update project progress and manage changes to the schedule baseline to achieve the plan” (PMBOK® Guide, Project Management Institute, 2017, p.173). Adjustments could be made to advance certain components and additional resources could be added to complete tasks as planned. The time management of critical tasks is important to stay on schedule. Accordingly, the schedule management plan will be adjusted to reflect these changes.

4.4 Develop a cost management plan to determine how costs will be planned and managed to ensure that the project is completed within the approved budget

According to PMI, Cost Management “includes the process involved in planning, estimating, budgeting, financing, funding, managing, and controlling cost so that the project can be completed within the approved budget. “(A Guide to Project Management Body of Knowledge (PMBOK ®Guide 2017, p.231). The cost management plan below guides and directs the project cost management.

4.4.1 Plan cost management. Financial controls procedures in terms of time reporting, required expenditure and disbursement reviews, accounting codes and standard contract provisions are described in the cost management plan. Informal cost estimating and budgeting related policies, procedures and guidelines as established by the PEU will be followed. Expert judgement based on the communication campaign for EQIP I will be used to estimate and budget the campaign for the Itz’at Academy. The cost management plan will be derived through consultative meetings with team members and sponsors.

4.4.2 Estimate costs. A cost estimate is a quantitative assessment of the likely cost for resources required to complete the activity. The cost estimates will be reviewed and refined during the project to reflect additional details as they become available. Costs for all resources that will be charged for the project.

4.4.3 Determine budget. The determining budget process is defined as, “the process of aggregating the estimated costs of individual activities or work packages to establish an authorized cost baseline” (*PMBOK® Guide*, Project Management Institute, 2017, p.248). This process is performed once. The total budget for the 6-month Itz’at Communication Campaign is BZD\$ **76,982.40**

Table 18

Budget Itz’at Communication Campaign (Source: Author)

Component	Units	Current Price per unit	Total
Component 1: Graphic Design			\$ 850.00
1.1 Brochure Designs	1	\$100.00	\$100.00
1.2 Banner Designs	5	\$100.00	\$500.00
1.3 Social media collaterals design (1080X1080 px)	10	\$10.00	\$100.00
1.4 T-shirts/Stickers/ Cups designs	1	\$150.00	\$150.00

Component	Units	Current Price per unit	Total
Component 2: Video Production			\$ 12,000.00
2.1 One-minute video	1	\$6,000.00	\$6,000.00
2.2 Animated reels (Nocturnal)	1	\$6,000.00	\$6,000.00
Component 3: Photography			\$ 3,000.00
3.0 Photography costs for advertising with Ambassadors	1	\$3,000.00	\$3,000.00
Component 4: Printing			\$ 30,250.00
4.1 Flyers 5.5" x 8.5" White, brochure paper	2000	1.00	\$ 2,000.00
4.2 Full color Vinyl Stand Alone Banner 25"x72"	4	\$1,000.00	\$ 4,000.00
4.3 T-Shirts	500	\$16.00	\$ 8,000.00
4.4 Stickers	3,000	\$1.00	\$ 3,000.00
4.5 Pencils, pens, rulers,	1000	\$0.50	\$ 5,000.00
4.6 Water bottles	200	\$5.00	\$1,000.00
4.7 Caps	200	\$5.00	\$1,000.00
4.8 Folders	200	\$4.00	\$ 1,000.00
4.9 Coffee mugs	250	\$9.00	\$ 2,250.00
4.10 Pop sockets	200	\$5.00	\$1,000.00

Component	Units	Current Price per unit	Total
4.11 Flags and Poles (2 National and 2 School Flags) (3 by 5 feet double sided)	4	\$250.00	\$ 2,000.00
Component 5: Advertisement			\$ 15,800.00
5.1 Facebook & Google Ads Posts	5 posts per month	\$1,000.00	\$ 5,000.00
5.2 Advertisement on Traditional Media (1 minute video aired during prime time)	4	\$200.00	\$ 800.00
5.3 Billboards based on a six-month contract. Size 10 ftx15ft Central Belize City	2	\$5,000.00	\$ 10,000.00
Component 6: Travel & Ambassador Stipends			\$8,084.00
6.1 Travel Costs related to district and town visits			\$4,809.00
6.1.1 Hotel (\$150/ person for 6 visits (3 rooms))	15	\$ 150.00	\$ 2,700.00
* San Pedro (\$250/room)	3	\$ 250.00	\$ 750.00
6.1.2 Stipend (\$40/ person)	15	\$ 40.00	\$ 840.00
*San Pedro (\$60/person)	3	\$60	\$ 180.00

Component	Units	Current Price per unit	Total
6.1.3 Transportation /boat (\$113/person)	4	\$ 113.00	\$ 339.00
6.2 Ambassador Stipends for 8 months (5 persons)	5	\$ 200.00	\$ 1,000.00
6.3 Tent (20'x20')	1	\$500.00	\$500.00
6.4 Foldable Lifetime Table 8'	5	\$275.00	\$1,375.00
6.5 Foldable Lifetime Chairs	4	\$100.00	\$400.00
Subtotal			\$69,984.00
Contingency (10%)			\$6998.40
Total			\$76,982.40

4.4.4 Control costs. Control costs is the process of “monitoring the status of the project to update the project costs and managing changes to the cost baseline” (PMBOK® Guide, Project Management Institute, 2017, p.257). This process is performed throughout the project. Any increase to the budget can only occur through the Perform Integrated Change Control Process. Managing the approved cost baseline will ensure effective cost control. In this process, monitor work performance against funds expended; prevent unapproved changes from being included in the reported cost or resource usage and influencing the factors that create changes to the authorized baseline are some of the ways in which cost can be controlled.

4.5 Develop a quality management plan to fulfill the project requirements and ensure that the project management and organizational policies, standards and processes are followed and met

Project quality management according to PMBOK is “the process of incorporating the organization’s quality policy regarding planning, managing and controlling project and product quality requirements in order to meet stakeholders’ objectives.” (PMBOK® Guide, Project Management Institute, 2017, p.271). Here the standards and requirements pertaining to the quality of the Itz’at Communication Campaign as well as its project management processes are addressed. This process will also ensure that quality is planned in or built into the project. The Project Quality Management processes are:

- **Plan Quality Management**- this process identifies quality requirements and/or standards for the project and the deliverables and establishes compliance.
- **Manage Quality**- this process breaks down the plan into executable quality activities that incorporates the organization’s quality policies into the project.
- **Control Quality**- is the process of monitoring and recording the results of executing the quality management activities to assess performance and ensure the outputs are complete, correct and meet customer expectations.

4.5.1. Plan quality management. Quality will be important throughout all phases of the Itz’at Communication campaign. It is important that all produced resources for the campaign have the information necessary to ensure that the enrollment target of the school is met. Controls must be put in place before mass production of print or audiovisual material to

ensure that accurate, concise, and relevant information about the school is communicated to the target audience.

Quality Standards, Criteria and Requirements:

- Website, print and audiovisual graphics, images and text should resonate with the target audience. There should be a balance of gender and ethnicity which showcases STEAM in a Belizean context.
- The Itz’at brand guidelines (Appendix 6) should be followed when using the Itz’at logo on any communication material used in the campaign.
- A Media team comprised of one administrator and two ISA faculty will undergo a workshop on Media training to standardize the messaging of the school.
- Project documents and deliverables must be submitted in a timely manner and in compliance with the administrative and financial guidelines of the project sponsor. For reporting purposes templates will be provided and a schedule for reporting will be provided.

Table 19

Acceptance criteria for Quality control. (Source: Author)

DELIVERABLES	ACCEPTANCE CRITERIA	ASSURANCE & QUALITY CONTROL	FREQUENCY	PERSON(S) RESPONSIBLE
Contracts	No Objection from the Bank, or Solicitor General to enter into a contract with a vendor.	Ex-ante revision of draft contract.	Once	Project Manager/ Sponsor
Printable	Materials are of high-quality gloss paper without color bleeding. Timely delivery.	Proofing of the sample signed off before printing.	Once	Press Officer/ Project Manager
Audiovisual Production	The production is of high-quality, audio, and engaging. The	The consultant will do Filming and Editing. The production will be	Once	Press Officer/ Project Manager/ Sponsor

DELIVERABLES	ACCEPTANCE CRITERIA	ASSURANCE & QUALITY CONTROL	FREQUENCY	PERSON(S) RESPONSIBLE
	duration is within the specifications.	reviewed with the sponsor before approval to be aired.		
Social Media Accounts	Participant is abreast of common talking points, key principles of the school and clear message to be delivered during the press round.	Each participant must complete a workshop on press engagement before going on air.	Once	Press Officer
Website	Functional site that contains the pertinent and updated	A checklist of school information will be used to ensure that the information is accurate,	Once every quarter	Technical consultant/ Project manager

DELIVERABLES	ACCEPTANCE CRITERIA	ASSURANCE & QUALITY CONTROL	FREQUENCY	PERSON(S) RESPONSIBLE
	information of the school.	visible, and present. Links within the website should be functional. Images on the website should reflect both gender and ethnical diversity of Belize.		

4.5.2 Manage quality. The process of reviewing quality requirements and control measurements to guarantee the use of proper quality standards and operational definitions is known as, "Perform Quality Assurance" according to the Project Management Body of Knowledge (PMBOK) guide. The PMI project management framework will be utilized to establish the project's various processes and ensure adherence to appropriate project management standards. The project manager will monitor and audit the project management procedures throughout the project's implementation to ensure compliance with the sponsor's guidelines on a biweekly basis. Additionally, the sponsor will conduct a financial audit once during the six-month project to ensure adherence to financial guidelines. Finally, all project deliverables will be thoroughly inspected and reviewed for quality documentation standards to ensure their effectiveness and consistency with the specified requirements.

4.5.3 Control quality. The control quality process is defined as, "the process of monitoring and recording results of executing the quality management activities in order to assess performance and ensure the project outputs are complete, correct, and meet customer expectations." (*PMBOK® Guide*, Project Management Institute, 2017, p.298).

When applying change requests in the control quality process, it is important to adhere to the process outlined for the project and use proper documentation. Additionally, the selection criteria for goods and services must be established, followed, and appropriately documented to ensure that the project objectives are met, and the intended target group is reached. This will aid in achieving the goals of the project effectively.

4.6 Develop a Project Resource management plan to guide how the resources will be determined, acquired, managed, and developed

Project Resource Management includes “the process to identify, acquire, and manage the resources needed for the successful completion of the project. These processes help ensure that the right resources will be available.” (PMBOK® Guide, Project Management Institute, 2017, p.307). The ISA campaign will use resources available through MoECST and those procured through the Bank’s processes.

4.6.1 Plan Resource Management. Plan Resource Management is the “process of defining how to estimate, acquire, manage and utilize physical and team resources.” (PMBOK® Guide, Project Management Institute, 2017, p.307). Except for the STEAM ambassadors, there will be no need to hire human resources outside of MoECST. It will be important to get the personnel’s commitment to the project since they will be contributing on a part-time basis. Establishing their roles and responsibilities is key. A RACI Chart will ensure that the different components of the campaign are assigned to key personnel with the Project Manager being the person to be accountable throughout the process.

- **Responsible** personnel- designates the task as assigned directly to this person (or group of people). The responsible person is the one who does the work to complete the task or create the deliverable. Every task should have at least one responsible person and could have several.
- **Accountable**- The accountable person in the RACI equation delegates and reviews the work involved in a project. The responsible person knows the expectations of the

project and completes the work on time. Every task should have only one accountable person and no more.

- Accountable parties are typically on the project team, usually in a leadership or management role.
- **Consulted**- Consulted people provide input and feedback on the work being done in a project. They have a stake in the outcomes of a project because it could affect their current or future work.
- **Informed**- Informed folks need to be looped into the progress of a project but not consulted or overwhelmed with the details of every task. They need to know what is going on because it could affect their work, but they are not decision makers in the process.

Table 20

RACI (Source: Author)

Activities	Project Manager	Finance Specialist	Procurement	PEU Admin	Sponsor (CEO)	Press Officer	Technical Team	ISA Principal	ISA Team	Chief	IDB Education	Specialist	J-WEL MIT	Consultant	Sourced Firm
Component 1 Design															
Logo	A	I	I	I	R	R	R	C	C	I	I	I	I	I	I
Technical Specifications for Website	A	I	I	I	I	I	R	C	C	I	I	I	I	I	I
ISA Contact Number	A	I	I	I	C	I	R	R	I	R	I	I	I	I	I
ISA Tag Line	A	I	I	I	R	R	R	C	C	I	I	I	I	I	I
Provide technical specifications for flyers, banners, social media collaterals Billboards, t-shirt sizes, Stickers, flags, and poles	A	I	C	I	I	R	I	C	R	I	C	C	C	I	I
Information for Webpage and pintables.	A	I	I	I	C	R	C	R	R	I	C	C	C	I	I

Activities	Project Manager	Finance Specialist	Procurement	PEU Admin	Sponsor (CEO)	Press Officer	Technical Team	ISA Principal	ISA Team	Chief	IDB Education	Specialist J-WEL MIT	Consultant	Sourced Firm
graphic design concepts/ specifications	A	I	C	I	C	R	C	C	C	I	I	I		R
social media link	A	I	I	I	I	R	R	C	C	I	I	I		I
Component 2: Video Production														
Coordinate Photoshoot	A	C	I	R	I	R	I	C	C	I	I	C		R
Coordinate Video Production	A	I	I	I	I	R	I	C	R	I	I	C		R
Approve Photos and Video	A	I	I	I	C	R	I	C	R	I	I	C		I
Component 3: Printing														
Provide information for Flyer and Website	A	I	I	I	C	R	I	R	R	C	I	C		I
Place Order for designs														
banners														
social media collaterals	A	R	R	R	C	C	I	C	C	I	I	I		I

Activities	Project Manager	Finance Specialist	Procurement	PEU Admin	Sponsor (CEO)	Press Officer	Technical Team	ISA Principal	ISA Team	Chief	IDB Education	Specialist	J-WEL MIT	Consultant	Sourced Firm
Flyers															
Intro Screen for short video															
Photographs															
T-shirt															
Pay for Advertisement on Fb and Google															
Ads Posts	A	R	I	I	C	R	I	C	C	C	I	I	I		
Component 4: Advertisement															
Create Update Social Media Accounts during Campaign	A	I	I	I	I	R	I	C	R	I	C	C	I		
Coordinate Traditional Media (TV and Radio Ads)	A	R	R	I	I	R	I	C	C	I	I	I	I		

Activities	Project Manager	Finance Specialist	Procurement	PEU Admin	Sponsor (CEO)	Press Officer	Technical Team	ISA Principal	ISA Team	Chief	IDB Education	Specialist J-WEL MIT	Consultant	Sourced Firm
Send requests to schools through DEC.	A	R	I	R	C	C	I	R	C	R	I	C	I	I
Book Venues	A	I	I	R	I	I	I	R	R	R	I	I	I	I
Organize Transportation for Students	A	R	I	R	I	I	I	R	I	R	I	I	I	I
Organize Presentation with Activities	A	R	I	R	I	I	I	R	R	R	I	I	I	I
Coordinate Transportation for ISA Team	A	R	I	R	I	I	I	R	C	I	I	I	I	I
Book hotel	A	R	I	R	I	I	I	R	C	I	I	I	I	I
Book Boat Tickets	A	R	I	R	I	I	I	R	C	I	I	I	I	I
Component 6: Open Days														
Send invitations to schools and parents	A	I	I	I	I	I	I	R	C	R	I	C	I	I
Coordinate site visits with P.E and Contractor	A	I	I	R	C	I	I	R	I	I	I	I	I	I

Activities	Project Manager	Finance Specialist	Procurement	PEU Admin	Sponsor (CEO)	Press Officer	Technical Team	ISA Principal	ISA Team	Chief	IDB Education	Specialist J-WEL MIT	Consultant	Sourced Firm
Set date and time for Open Day	A	C	I	I	I	C	I	R	R	I	I	C	I	I
Organize Presentation with Activities/ Tour	A	I	I	I	C	R	I	R	R	C	I	C	I	I
Distribute material	A	C	C	I	I	I	I	C	R	I	I	I	I	I
Coordinate refreshments	A	C	I	I	I	I	I	R	I	I	I	I	I	I
Component 7: Inauguration														
Set Date and Time	A	C	I	I	C	R	I	R	C	I	I	C	I	I
Set Agenda	A	I	I	I	C	R	I	R	R	I	I	C	I	I
Invite the Media	A	C	I	I	C	R	I	I	I	I	I	I	I	I
Invite Special Guests: (MOECST, IDB, SLS, ITVET, Chamber, MIT, etc.)	A	I	I	R	C	R	I	C	I	I	C	C	I	I
Distribute Printed Material	A	C	C	I	I	I	I	R	R	I	I	I	I	I

Activities	Project Manager	Finance Specialist	Procurement	PEU Admin	Sponsor (CEO)	Press Officer	Technical Team	ISA Principal	ISA Team	Chief	IDB Education	Specialist J-WEL MIT	Consultant	Sourced Firm
Organize Podium	A	I	I	C	I	R	I	I	R	I	I	I	I	I
MC	A	I	I	I	C	I	I	C	R	I	I	C	I	I
Coordinate snacks/ refreshments	A	I	I	I	I	I	I	C	R	I	I	I	I	I
Organize Clean up	A	I	I	I	I	I	I	C	R	I	I	I	I	I

Key: R- Responsible; A- Accountable; C- Consulted; I- Informed

4.6.2 Estimate Activity Resources. Estimate Activity Resources is “the process of estimating team resources and the type of quantities of material, equipment, and supplies necessary to perform project work.” (*PMBOK® Guide*, Project Management Institute, 2017, p.307). Through meetings the resource list for the campaign will be determined.

Table 21

Resource list for ISA Communication Campaign

Component	Units
Component 1: Graphic Design	
1.1 Brochure Designs	1
1.2 Banner Designs	5
1.3 Social media collaterals design (1080X1080 px)	10
1.4 T-shirts/Stickers/ Cups designs	1
Component 2: Video Production	
2.1 One-minute video	1
2.2 Animated reels (Nocturnal)	1
Component 3: Photography	
3.0 Photography costs for advertising with Ambassadors	1
Component 4: Printing	
4.1 Flyers 5.5" x 8.5" White, brochure paper	2000
4.2 Full color Vinyl Stand Alone Banner 25"x72"	4
4.3 T-Shirts	500

Component	Units
4.4 Stickers	3,000
4.5 Pencils, pens, rulers,	1000
4.6 Water bottles	200
4.7 Caps	200
4.8 Folders	200
4.9 Coffee mugs	250
4.10 Pop sockets	200
4.11 Flags and Poles (2 National and 2 School Flags) (3 by 5 feet double sided)	4
Component 5: Advertisement	
5.1 Facebook & Google Ads Posts	5 posts per month
5.2 Advertisement on Traditional Media (1 minute video aired during prime time)	4
5.3 Billboards based on a six-month contract. Size 10 ftx15ft Central Belize City	2
Component 6: Travel & Ambassador Stipends	
6.1 Travel Costs related to district and town visits	
6.1.1 Hotel (\$150/ person for 6 visits (3 rooms))	15
* San Pedro (\$250/room)	3

Component	Units
6.1.2 Stipend (\$40/ person)	15
*San Pedro (\$60/person)	3
6.1.3 Transportation /boat (\$113/person)	4
6.2 Ambassador Stipends for 8 months (5 persons)	5
6.3 Tent (20'x20')	1
6.4 Foldable Lifetime Table 8'	5
6.5 Foldable Lifetime Chairs	4

4.6.3 Acquire Resources. Acquire Resources is “the process of obtaining team members, facilities, equipment, materials, supplies, and other resources necessary to complete project work.” (*PMBOK® Guide*, Project Management Institute, 2017, p.307). Details of the procurement procedures can be found in the section on the Procurement Management Plan.

4.6.4 Develop team. Develop Team is “the process of improving competencies, team member interaction, and the overall team environment to enhance project performance.” (*PMBOK® Guide*, Project Management Institute, 2017, p.307). The project manager will be responsible for promoting a harmonious working relationship among the project team and will take charge of supervising, administering, and mentoring them throughout the project implementation. Additionally, the project team will collaborate and work together to enhance and refine certain aspects of the project through a process of development and iteration.

Competency is defined as, “the skill and capacity required to complete assigned activities within the project constraints” (*PMBOK® Guide*, Project Management Institute, 2017,p. 319). The main skills and competencies required for the work team include: communication, time management, conflict resolution, risk management, collaboration, technical documentation and problem-solving. When there are mismatches within the project team members, proactive responses such as trainings, hirings, schedule changes or scope changes can be initiated to address the challenges created.

4.6.5 Manage team. Manage team is “the process of tracking team member performance, providing feedback, resolving issues, and managing team changes to optimize project performance.” (*PMBOK® Guide*, Project Management Institute, 2017, p.307). Most of the team interactions will occur in a consultative manner with the team coming together only for group meetings. The project manager will practice conflict management if conflict escalates to facilitate a satisfactory resolution. Conflict will be addressed early and in private, using a direct, collaborative approach. If disruptive conflict continues, formal procedures may be used, including disciplinary actions.

4.6.6 Control resources. Control Resources is “the process of ensuring that the physical resources assigned and allocated to the project are available as planned, as well as monitoring the planned verses actual use of resources, and performing corrective action as necessary.” (*PMBOK® Guide*, Project Management Institute, 2017, p.307). Performance reviews can be used to measure, compare, and analyze planned resource utilization to actual resource utilization. Problem solving can also be used to ensure that the activities are carried out using alternative resources if necessary.

4.7 Develop a communications management plan to determine proper communication and management of project information to project team members and relevant stakeholders

Project Communications Management includes the processes necessary to ensure that the information needs of the project and its stakeholders are met through development of artifacts and implementation of activities designed to achieve effective information exchange.” (PMBOK® Guide, Project Management Institute, 2017, p.359).

4.7.1 Plan Communication Management. “The process of developing an appropriate approach and plan for project communication activities based on the information needs of each stakeholder or group, available organizational assets and the needs of the project.” (PMBOK® Guide, Project Management Institute, 2017, p.359). The plan will outline the strategy for communicating with stakeholders and will encompass the requirements for stakeholder communication, including its description, the frequency of reporting, the intended audience, the format for information dissemination, and the individual responsible for receiving the information. The project manager is to ensure that the 5 C’s of written communication in composing traditional written or spoken message is followed:

- **Correct grammar and spelling**
- **Concise expression and elimination of excess words.**
- **Clear purpose and expression directed to the need of the reader.**
- **Coherent logical flow of ideas**
- **Controlling the flow of words and ideas.**

Table 22

Communication Requirements Matrix (Source: Author)

Information to be communicated	Description of Information	Frequency of Distribution	Person responsible for communicating information	Person(s) receiving the information	Format of information
Kickoff meeting	Initial meeting to understand the project, its purpose, and objectives.	One meeting	Project Sponsor and project manager	Project Team	Hard and soft copy of Project documents
Project Team Meetings	To provide status updates.	Biweekly	Project Team	Project Manager	Soft Copy via email
Mid-semester Report	Narrative status report on how the project activities is	Once, Half-way in the project.	Project Manager	Sponsor and Project team.	Soft Copy via email

	progressing and deliverables to date.				
Financial Report	Status on finances to date.	Monthly	Financial specialist, sponsor, and project manager	Project sponsor and Project Coordinator	Soft Copy via email
Final Report	Narrative report on all activities undertaken throughout the life of the project and deliverables.	Once at the end of the project	Project Manager	Sponsor	Soft Copy via email

4.7.2 Manage communications. “The process of ensuring timely and appropriate collection, creation, distribution, storage retrieval, management, monitoring, and the ultimate disposition of project information.” (PMBOK® Guide, Project Management Institute, 2017, p.359). ISA Communication Campaign will employ various communication methods and technologies such as in-person meetings, virtual meetings, emails, and WhatsApp messages. Meetings will provide an opportunity to update stakeholders on the project’s progress, activities and address any questions they may have. Press releases will be utilized to inform potential participants during the recruitment phase and members of the public about the project and its accomplishments.

4.7.3 Monitor communications. “The process of ensuring the information needs of the project and its stakeholders are met.” (PMBOK® Guide, Project Management Institute, 2017, p.359). Expert judgement will be used when communicating with the various stakeholders. Meetings will serve as a platform for making decisions, addressing stakeholder inquiries, and engaging in conversations with suppliers, vendors and other individuals involved in the project.

4.8 Develop a risk management plan that will determine how risk associated with the project will be identified, managed, assessed, and prioritized

Risk can have both a positive and negative impact on the project. Risks can be individual or overall project risks. Projects operate in the context of constraints and assumptions which increase the risk of deviation and failure of achieving the project objectives. It is therefore important that project risk management is intentional. Project Risk Management increases the probability of positive risks and decreases the probability and/or

impact of negative risks. (PMBOK® Guide, Project Management Institute, 2017, p.395). To manage the risks effectively, the project team should know the stakeholder's risk tolerance. Despite the small size and simplicity of the campaign, the overall success of the campaign has far-reaching implications apart from student enrollment. This risk management plan is therefore important to ensure the success of the campaign.

4.8.1 Plan risk management. Plan Risk Management is, “the process of defining how to conduct risk management activities for a project.” This process balances identified and unknown risks with the risk tolerance of the stakeholders. It determines the degree, type, and visibility of risk management (PMBOK® Guide, Project Management Institute, 2017, p.401). In this section, the Risk Breakdown structure will identify the responsible team members for risk management activities. Risk categories will also be identified, as well as definitions of risk probability and impact.

Methodology: Expert judgement, brainstorming and checklist analysis. The expert judgement of team members who have been involved in communication campaigns will be used in this process. They will brainstorm and develop a checklist of positive and negative risks that can be used for the risk register. Additionally, the impact and probability matrix will be derived and used to prioritize the risks. Performing quantitative risk analysis will not be done under this project. Risk response will be developed and implemented to track and monitor the risks undertaken and emerging throughout the project lifecycle.

Roles and Responsibilities: The press officer, project coordinator and the project manager will work collaboratively to identify and manage all risks related to the project.

Risk Categories: Most of the risks associated with the project are related to scheduling, resources, procurement, stakeholder requirements and quality.

Table 23

Risk Definition and Scale (Source: Author)

SCALE	SCORE
Very High	1
High	2
Medium	3
Low	4
Very Low	5

4.8.2 Identify risks. Identify Risk is the process of identifying individual project risks as well as sources of overall project risks and documenting their characteristics. It allows the project team to respond appropriately to the identified risks (PMBOK® Guide, Project Management Institute, 2017, p.409).

The project team would brainstorm and interview stakeholders to gather data on the risk appetite and their concerns. The output of this process is the risk register, which will list the risks corresponding to the categories identified below.

Table 24**Risk Register (Source: Author)**

CATEGORY	RISK DESCRIPTION	RISK ID	IMPACT	PROBABILITY	SCORE
SCHEDULE	Fixed timeline to implement the project due to competitor's registration and acceptance deadlines.	R1	5	4	20
BUDGET	Insufficient funds to complete project.	R2	1	1	1
SCOPE	Further decomposition of WBS may lead to widening scope.	R3	3	3	9
RESOURCES	Overworked Project team	R4	4	4	16

CATEGORY	RISK DESCRIPTION	RISK ID	IMPACT	PROBABILITY	SCORE
	since their workload is not reduced while assisting on this project.				
	Using the bank's procurement method may lead to delays in acquiring promotional items.	R5	4	4	16
	The new nature of the school and new faculty who will be recruiting may	R6	4	4	16

CATEGORY	RISK DESCRIPTION	RISK ID	IMPACT	PROBABILITY	SCORE
	result in mixed messages.				
	The school building may not be completed in time	R7	4	5	20
QUALITY	The Press Officer is the only person who will determine the quality of the printable deliverables. He may not prioritize the project.	R8	5	5	25

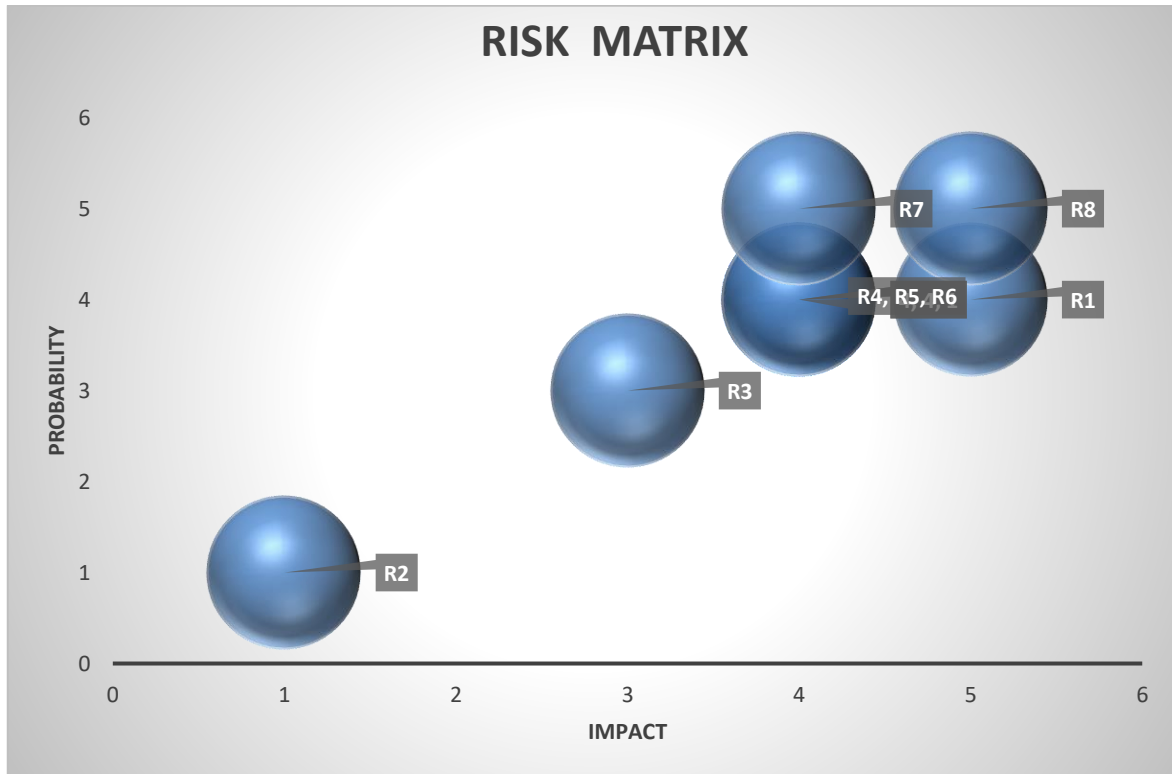


Figure 10. Risk Matrix. Source: Author

4.8.3 Perform qualitative risk analysis. Perform Qualitative Risk Analysis is the process of prioritizing individual project risks for further analysis by assessing their probability of occurrence and impact as well as other characteristics risks (PMBOK® Guide, Project Management Institute, 2017, p.419). This process is performed throughout the projects.

From Chart 10, it can be identified that R8, with a score of 25, and R1, with a score of 20, are the individual risks that need to be mitigated. The nature of the role of the Press Officer who will take on the designs of the promotional items coupled with his involvement for the other events of the Ministry will mean that he will be overworked. This risk needs to be managed through timely submission of the designs for the procurement process to begin.

Ensuring that milestone activities are monitored closely. He is also in charge of quality control, so he needs to be able to provide feedback and approval in a timely manner to avoid procurement delays.

4.8.4 Perform Quantitative Risk Analysis. Perform Quantitative Risk Analysis is the process of numerically analyzing the combined effect of identified individual project risks and other sources of uncertainty on overall project objectives (PMBOK® Guide, Project Management Institute, 2017, p.428).

Because of the nature of the ISA Communication project and the short timeframe in which it will be implemented, projected values will not be assigned to the risks and as a result, the perform quantitative risk analysis will not be undertaken.

4.8.5 Plan Risk Responses. Plan Risk Responses is the process of developing options, selecting strategies, and agreeing in actions to address overall project risk exposure, as well as to treat individual project risks (PMBOK® Guide, Project Management Institute, 2017, p.437).

The following strategies can be employed to mitigate individual project risks.

Table 25**Individual Risk Response Strategy (Source: Author)**

RISK ID	RISK DESCRIPTION	RISK RESPONSE STRATEGY	CONTINGENCY PLAN
R1	Fixed timeline to implement the project due to competitor's registration and acceptance deadlines.	Mitigate impact	Ensure that the deadline for Applications is extended beyond the average time. To allow more students to apply. Quick turn around for randomization process.
R2	Insufficient funds to complete project.	Mitigate probability	Include a 10% contingency to cover costs that were overlooked. Additionally, reduce the number of promotional items that will be distributed.

RISK ID	RISK DESCRIPTION	RISK RESPONSE STRATEGY	CONTINGENCY PLAN
R3	Further decomposition of WBS may lead to widening scope.	Mitigate probability	At the point of development of the WBS ensure that it is adequately decomposed. Follow the 100% rule.
R4	Overworked Project team since their workload is not reduced while assisting on this project.	Mitigate Probability and impact	Some of the design components can be outsourced. The Project Coordinator will provide support where needed.
R5	Using the bank's procurement method may lead to delays in acquiring promotional items.	Mitigate probability	Ensure timely submission of the procurement documents using technical specifications provided by the consultants.

RISK ID	RISK DESCRIPTION	RISK RESPONSE STRATEGY	CONTINGENCY PLAN
R6	The new nature of the school and new faculty who will be recruiting may result in mixed messages.	Mitigate probability	A core Media team will be identified among the faculty. The Media team will undergo PR training and develop answers to frequently asked questions.
R7	The school building may not be completed in time	Mitigate impact	Ensure that the refurbished buildings will be ready in time for July.
R8	The Press Officer is the only person who will determine the quality of the printable deliverables. He may not prioritize the project.	Mitigate impact	If the press officer is unavailable, approval will be given by the CEO while ensuring that quality is maintained.

Overall project risk can be avoided by not showing images of the current construction site as it may cause speculation among the target audience that the building will not be completed in time. The fact that ISA is the first-of-its-kind school in the region, the school will be promoted by the GOB Press Office and local Newspapers as a form of the Government's initiatives in Education.

4.8.6 Implement risk responses. Implement Risk Responses is the process of implementing agreed-upon risk response plans (PMBOK® Guide, Project Management Institute, 2017, p.449). The project will rely on the expert judgment of the project team. It is important that the team members take ownership of their assigned tasks and communicate difficulties that are foreseen. Timely communication of risk will allow the team to implement the contingency plan or alternatively, devise a new strategy.

4.8.7 Monitor risks. Monitor Risk is the process of monitoring the implementation of agreed-upon risk response plans, tracking identified risks, identifying and analyzing new risks and evaluating risk process effectiveness throughout the project (PMBOK® Guide, Project Management Institute, 2017, p.453). To monitor the risks of the overall project, the IDB Education Specialist and the Project Coordinator have biweekly meetings to discuss project progress. The communication strategy campaign will complete a mid-term report where evolving risks will be highlighted. Other project reporting obligations will allow the monitoring of the risks for the duration of the project.

4.9 Plan Procurement Management to acquire goods or services required for project implementation

Project Procurement Management includes the process necessary to purchase or acquire products, services, or results needed from outside of the project team (PMBOK® Guide, Project Management Institute, 2017, p.459) This process will be guided by the Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank GN-2349-15.

4.9.1 Plan procurement management. During this process project procurement decisions are documented, specifying the approach and potential sellers (PMBOK® Guide, Project Management Institute, 2017, p.459) As established by the EQIP II Loan documents, all procurement is subject to an ex-ante revision method. The Promotional items will be procured as established in the procurement plan as Activity 2.2.2.2 see table 24 below.

Table 26

EQIP II Procurement Plan (Source: MoECST PEU EQIP II Procurement Plan)

Executing Agency	Activity	Additional Information	Procurement Method	Estimated Amount estimated Amount USD\$	Associated Component	Review Method	Comments
PEU	2.2.2.2 Supply and Delivery of	Lot 1: Promotional Items	Shopping	16,000	Component II: STEAM Learning in	Ex-ante	Promotional items with the school logo will

	Promotional and other Items for the STEAM Lab School	Lot 2: Other Items			Secondary School		be used as part of the recruitment/ communication campaign for the SLS.
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The relatively small budget allows for the approval of the Price Comparison approach to procurement. The package will be prepared in two lots with suppliers submitting partial bids by lot. The PEU would need to submit draft Request for Quotation Bid Documents, as per the *Procurement of Goods and Works Financed by the Inter-American Development Bank GN-2349-15* policy.

4.9.2 Conduct procurements. Conduct Procurement is the process of obtaining seller responses, selecting a seller, and awarding a contract (PMBOK® Guide, Project Management Institute, 2017, p.459). Once the bank’s No Objection is received then the unit can proceed with the publication of the Request for Quotation. Interested bidders would have 14 days to prepare their response to the RFQ providing the following in their quotation:

- a. copies of documents defining the constitution or incorporation, and principal place of business of the Supplier.
- b. Copy of written power of attorney of the signatory of the Bid to commit the Bidder.
- c. Letter of quotation: in the format indicated in Section C, “Bidding Forms”.
- d. Bid Validity Declaration using the form included in Annex III “Security Forms.”
- e. Price offer as specified in RFQ documents.

f. Technical specifications compliance sheet

The contract will be awarded to the Quotation determined to be substantially responsive to the Shopping Documents and represents the lowest evaluated cost.

Eligibility of bidders, goods and related services will be guided by the IDB *GN-2349-15* policy:

1.1. A Bidder, and all parties constituting the Bidder, shall be nationals from member countries of the Bank. Annex I. Eligible Countries of this document establishes the Bank's member countries, as well as the criteria to determine the nationality of the Bidders and the country of origin of goods and services.

1.2. A Bidder, including the directors, key personnel, principal shareholders, and proposed personnel should not have conflicts of interest.

1.3. All the Goods and Related Services to be supplied under the Contract and financed by the Bank shall have their origin in any Bank's member country in accordance with Annex I, "Eligible Countries,"

1.4. For purposes of this Clause, the term "goods" includes commodities, raw material, machinery, equipment, and industrial plants; and "related services" includes services such as insurance, transportation, installation, commissioning, training, and initial maintenance.

1.5. The term "origin" means the country where the goods have been mined, grown, cultivated, produced, manufactured, or processed;

or, through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.

1.6. The criteria to determine the origin of the goods and services has been established in the Annex I, “Eligible Countries.”

1.7. For all procurement processes financed by the Bank, clauses of Prohibited Practices shall be applied during the Shopping Process and throughout the execution of a contract, according to Section D, GCC 2.1 and to Section 1.16 of Policies GN-2349-15

The evaluation committee will be tasked to evaluate the Technical and Financial proposals of bidders guided by procurement best practices. The Evaluation report and recommendation for Award of Contract will be submitted to the bank for No Objection. Once received, the procurement specialist will inform the bidders and share the evaluation report. There will be a standstill period for two weeks during which the bidders can inquire about their failed bid. Once the bidder agrees to the terms and conditions of the contract, a signed copy of the contract will be submitted to the Ministry of Finance and the IDB for assignation of a PRISM number.

4.9.3 Control procurements. Control Procurement is the process of managing procurement relationships, monitoring contract performance, making changes and corrections as appropriate and closing out contracts (PMBOK® Guide, Project Management Institute, 2017, p.459). It is the role of the procurement specialist and the project coordinator to manage the contract to ensure the timely delivery of the goods and services. It is important

to verify the specifications of the goods delivered as part of the Quality Management Plan. The procurement specialist will manage any change requests and update the project management plan. They will work closely with the Financial Specialist to process payments as per the contractual obligations of the client. It is important to monitor the timely delivery of goods and services and justify any amendment or contract extension in a timely manner, seeking the Bank's No objection as well as the Contractor General's approval before the end of the contract as per GOB policy.

4.10 Develop a stakeholder management plan to accurately identify stakeholders, manage their expectations and determine their impact on the project

Project Stakeholder management includes the processes required to identify the people, groups or organizations that could impact or be impacted by the project, to analyze stakeholder expectations and their impact on the project, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution (PMBOK® Guide, Project Management Institute, 2017, p.503). The four processes of the plan include: identifying stakeholders, planning, managing, and monitoring stakeholder engagement.

4.10.1 Identify stakeholders. Identifying stakeholders equips the project manager with the ability to analyze and document the interests, involvement interdependencies, influence, and potential impact on project success (PMBOK® Guide, Project Management Institute, 2017, p.503). Expert judgement and brainstorming will be used to identify and prioritize the stakeholders. The Itz'at Communication Stakeholder register is found below:

Table 27

Itz'at Communication Campaign Stakeholder Register (Source: Author)

IDENTIFICATION INFORMATION		IMPACT				ENGAGEMENT APPROACH
ID No.	NAME	MAIN REQUIREMENTS	MAIN EXPECTATIONS	INFLUENCE	ROLE IN PROJECT	
1	Students	Information on differentiators of the school pedagogy, matriculation requirements, acceptance feedback and registration information.	Have an interest in STEAM and complete primary education.	Moderate	Project target audience	The Itz'at faculty team will conduct intra city recruitment by visiting primary schools and sharing application requirements and forms. Communicate via social media platforms and billboards using

IDENTIFICATION INFORMATION		IMPACT				ENGAGEMENT APPROACH
ID No.	NAME	MAIN REQUIREMENTS	MAIN EXPECTATIONS	INFLUENCE	ROLE IN PROJECT	
						promotional items as well.
2	Sponsor	Approval of all deliverables and hiring of Project manager and PEU staff as needed.	Provide funding for the project	High	Project Sponsor	The project manager will provide status reports via email, will complete deliverables within the reporting period.
3	IDB Education Specialist	Ex ante revision and No Objection to the project	Proper management of the project implementati	High	Project Sponsor	The Project manager will report on the timely deliverables.

IDENTIFICATION INFORMATION		IMPACT				ENGAGEMENT APPROACH
ID No.	NAME	MAIN REQUIREMENTS	MAIN EXPECTATIONS	INFLUENCE	ROLE IN PROJECT	
		management activities	on and timely reports.			Will provide the Bank's No Objection.
4	Project Management Team	Project implementation	Successful implementation of the project to meet the objectives.	High	Project Staff	Communicate via email, face-to-face in matters concerning the project, provide input on status and final reports.
5	Itz'at Administration team	Provide Itz'at policy information to the project management team.	Conduct the recruitment of students, manage	High	Responsible for communicating directly to the target audience.	Communicate via email, face-to-face and via telephone.

IDENTIFICATION INFORMATION		IMPACT				ENGAGEMENT APPROACH
ID No.	NAME	MAIN REQUIREMENTS	MAIN EXPECTATIONS	INFLUENCE	ROLE IN PROJECT	
			social media page, and take ownership of the application and registration data management.			

IDENTIFICATION INFORMATION		IMPACT				ENGAGEMENT APPROACH
ID No.	NAME	MAIN REQUIREMENTS	MAIN EXPECTATIONS	INFLUENCE	ROLE IN PROJECT	
6	Itz'at Faculty	Conduct recruitment campaign	Share milestone list. Have promotional items to share with recruits.	Low	Communicate with target audience.	Face-to-face for Kick-off meeting; thereafter, Communicate via email.
7	Press Officer	Design, approve and proof all material to be published.	Timely submissions of material to be published.	Medium	Quality control	Communicate via email, face-to-face on matters concerning the project, provide input on status and final report.

IDENTIFICATION INFORMATION		IMPACT				ENGAGEMENT APPROACH
ID No.	NAME	MAIN REQUIREMENTS	MAIN EXPECTATIONS	INFLUENCE	ROLE IN PROJECT	
8	J-WEL MIT consultants	Provide training to Itz'at Teachers and assist to create the narrative for the recruitment drive.	Schedule the faculty time so that they can continue the professional development training.	Low	Itz'at professional development Consultants	Communicate via email. Schedule Itz'at faculty availability for in house training and intra city recruitment.
9	Sourced Firm	Clear indication of concept for the ad. Access to the site,	Clear and constant communication, timely	Medium	Create audiovisual material that will be aired on	Face-to-face to discuss concept and email to manage deliverables

IDENTIFICATION INFORMATION		IMPACT				ENGAGEMENT APPROACH
ID No.	NAME	MAIN REQUIREMENTS	MAIN EXPECTATIONS	INFLUENCE	ROLE IN PROJECT	
		faculty, and students.	submission of quality deliverables.		national television radio and over social media.	and approve submissions.

4.10.2 Plan stakeholder engagement. This process involves developing the approaches to involve project stakeholders based on their needs, expectations, interests, and potential impact on the project (*PMBOK® Guide*, Project Management Institute, 2017, p.503). Some of the details of the plan can be referenced in *Table 23: Itz'at Communication Campaign Stakeholder Register*.

4.10.3 Manage Stakeholder Engagement. This is the process of communicating and working with the stakeholders to meet their needs and expectations. This process allows the project manager to address issues and foster appropriate stakeholder engagement involvement (*PMBOK® Guide*, Project Management Institute, 2017, p.503). It is also important to manage change requests that may arise during the project implementation to ensure that the needs of the stakeholders are being met by the project.

According to PMBOK Guide 6th Edition, the stakeholder Matrix can be used to classify the level of engagement that will be required.

- Unaware- unaware of the project and potential impacts
- Resistant- Aware of the project and potential impacts but resistant to any change that may occur because of the work of the project.
- Neutral- Aware of the project; but neither supportive nor unsupportive
- Supportive- Aware of the project and potential impacts and supportive of the work and its outcomes.
- Leading- Aware of the project and potential impacts and actively engage in ensuring that the project is a success.

In Table 24 below, C represents the current engagement level of each stakeholder and D indicates the level that the project team desires. The gap between current and desired for each stakeholder will direct their level of communication to effectively engage that stakeholder. The gap between the current and desired rating is an essential element of monitoring stakeholder engagement (*PMBOK® Guide*, Project Management Institute, 2017, p.503).

Table 28

Stakeholder Engagement Assessment Matrix (PMBOK® Guide, Project Management Institute, 2017, p.522)

Stakeholder	Unaware	Resistant	Neutral	Supportive	Leading
Students	C			D	
Sponsor				CD	
IDB Education Specialist				CD	
Project Management Team				C	D
Itz'at Administration team				C	D
Itz'at Faculty				C	D
Press Officer		C			D

Stakeholder	Unaware	Resistant	Neutral	Supportive	Leading
J-WEL MIT consultants				CD	
Sourced Firm	C				D

4.10.4 Monitor stakeholder engagement. The process of monitoring project stakeholder relationships and tailoring strategies for engaging stakeholders through the modification of engagement strategies and plans. This is done throughout the life cycle of the project. The Stakeholder register is to be updates as needed. Work performance information will be included in status updates to identify the current project support compared to the desired levels of engagement as defined in the stakeholder engagement assessment matrix. Additionally, change request may include corrective and preventative actions to improve the current level of stakeholder engagement.

4.11 Performance Plan

A balanced scorecard (BSC) is defined as a management system that provides feedback on both internal business processes and external outcomes to continuously improve strategic performance and results (Balanced Scorecard Institute, 2023). Key Performance Indicators (KPIs) are the critical (key) quantifiable indicators of progress toward an intended result. KPIs provide a focus for strategic and operational improvement, create an analytical basis for decision making and help focus attention on what matters most. The overall performance of the project activities will be rated against the key performance indicators identified in Table 29.

Table 29
Key Performance Indicators for Itz'at STEAM Academy

	Objectives	Measures	Targets	Initiatives
Financial	Decrease Costs	Current Budget	Decrease by \$30,000	Use low-cost selection method for procurement. Use promotional items that cost less.
Customer	Increase Expression of Interest	Submission of Registration form	150	Share the link to the registration form via scavenger hunt activity.
Internal Business Processes	Improve internal communication	Number of clarifications provided	1 per meeting	- Share minutes of the meetings

	Objectives	Measures	Targets	Initiatives
Learning & Growth	Number of new followers	Percentage of traffic on the channels. (social media marketing profits/ Total cost of social media marketing efforts) x 100	12 per week	-post weekly - make a few changes on the page to bring new leads by rewriting the call to action text. Changing the color of the CTA button or adding more relevant content on the page to improve lead generation.

5 Conclusion

Using PMI principles and essential knowledge areas to create a complete project management plan for the ISA Communication campaign promoted the complete understanding of the PMI framework. It focused the integration of various knowledge areas and underlined the importance of planning for project activities related to the general objective of ensuring enrollment for the newly established Itz'at STEAM Academy in Belize City.

Due to the short length of the ISA Communication Project, efficient yet timely and exact execution is required to achieve the Specific objectives for the FGP.

1. Project Integration Management- This section of the plan described the foundational work of the project team. It ensures coordination throughout the project lifecycle, providing a clear understanding of the roles and responsibilities of team members.
2. Project Scope Management- This section ensured that the 100% rule was followed when developing the WBS. This project was broken down into five phases: Project Planning, Conceptual Designing, Design Execution, Pre-Launching and Project Closeout & Launch.
3. Project Schedule Management- The schedule management plan included the activity list for the 5 phases of the project. These five phases will be executed in 111 days, to conclude June 25, 2023. Focus should be dedicated on the task included on the critical path to ensure there are no delays when executing the plan.

4. Project Cost Management- This plan included the project budget of \$76,982.40 BZD. The cost was calculated using parametric estimating. Analogous was not applicable since there was no historical data to refer to. The budget included a contingency reserve of 10%.
5. Project Quality Management- The following quality factors were included in the Quality Management Plan. Each included a metric that will be used to measure the degree of conformance and nonconformance. Tools to conduct quality assessment include inspection, data gathering and testing.
6. Project Resource Management- Both physical and human resources were considered in the Resource Management Plan. The project RACI matrix and physical resource list were included in the plan. The balanced scorecard will be used to measure the overall performance of the project.
7. Project Communications Management- The Communication plan included the communication matrix that will ensure effective and timely communication.
8. Project Risk Management- The Risk Management Plan included an estimation of the risk appetite and the probability and impact matrix. The risk register was used to develop responses for all outlined risks.
9. Project Procurement Management- Procurement Management Plan outlined the Financial Agent Procurement policies and the bid requirements for the bidders using the least cost procurement method.

10. Project Stakeholder Management- The stakeholder register identified the key stakeholder's role, expectation, and major requirement. The Power Interest Grid identified the stakeholder which would need to be consulted, informed and engaged.

6 Recommendations

It is recommended that the ISA Communication Campaign Project be implemented utilizing the project management plan produced within the PMI framework. Standards, processes, tools and techniques, inputs, and outputs all play important roles in giving structure and a methodical approach to project activities execution.

1. **Project Integration Management-** Adhering to the basic stages of project design and development, such as initiation, planning, execution, monitoring, controlling, and closing, as well as integrating knowledge areas, provides a smooth flow and comprehension. This adherence is critical for meeting deadlines, budgets, scopes, and required standards. Given that the project team is made up of individuals who will be working on a part-time basis on the project it is important to begin with clear expectations of time and level of involvement.
2. **Project Scope Management-** Given that the school is new, the work to create an identity of the school should have been completed before the kickoff meeting. Having to complete some of the design elements within the Communication campaign can lead to scope creep. The Project Manager will need to monitor the activities to ensure that the team is on task. Status reports should be communicated in a timely manner.
3. **Project Schedule Management-** Once the critical path is identified, the project manager should monitor the progress of the activities. The project manager will need to use resource optimization or schedule compression techniques in the event that the project is delayed.

4. Project Cost Management- The project manager should be guided by the procurement specialist in terms of ensuring compliance with the IDB's procurement policy. The least cost selection method should be used to ensure that the project stays under budget. Perhaps the definitive estimate should be used to better estimate the cost. The PERT estimate could be used to determine the time more accurately for execution.
5. Project Quality Management- Inspections can be done more frequently to ensure that the project activities are being done to the agreed quality standard.
6. Project Resource Management- Soft skills should be employed to manage the project team. The project manager should be mindful of the workload of the team members at their normal desk.
7. Project Communications Management- The whatsapp group can be used to stay in communication to provide updates on the activity implementation. Team members should ensure that they are documenting and updating the documents in the google drive. They should also log issues, use the template for change requests and log Lessons Learned. This documentation is important because it can be a guide for future communication campaigns.
8. Project Risk Management- The highest risk revolves around the Press Officer. He is responsible for several activities including design and quality control. Since he is the only Press Officer responsible for the Ministry's activities he may be unable to provide the amount of hours required for this project. His availability needs to be clearly established to prevent delays. Additionally, the procurement process is at a moderate risk due to the inexperience of the team in following the procurement

process. The procurement specialist on retainer needs to take ownership of the process to be able to guide the project team to fulfill the requirements of both GOB and IDB to prevent failed or delayed procurement processes.

9. Project Procurement Management- The procurement process is extensive. The project manager should account for the days required to get the various levels of No Objection from the bank, Smart Stream, Ministry of Finance, and if necessary Contractor General's office. It is important to follow both the IDB and GOB public Procurement Policy. In the most part they are similar but require varying levels of authorization depending on the procurement method employed.
10. Project Stakeholder Management Plan- Stakeholder expectations should be monitored to ensure that all are appropriately informed or consulted. Ensuring that the needs of the stakeholders are met is the mark of a successful project implementation.

In summary, the PMI PMBOK proves to be an essential guide in following through with the PMI framework and it should be continuously referred to as a project is being developed and implemented. It helps with the proper understanding of all that is required to complete the work and most importantly, to complete the project successfully.

7 Validation of the FPG in the Field of Regenerative and Sustainable Development

The Anthropocene Epoch is an unofficial unit of geologic time, used to describe the most recent period in Earth's history when human activity started to have a significant impact on the planet's climate and ecosystems (National Geographic, 2023). Some pundits of this theory also express difficulty in believing that small individual efforts made can curb the effects of man's activity on the environment. They fail to see how collective action can be impactful. Regenerative Development is an approach that encourages communities to support and create positive relationships that will benefit society and our environments by allowing the system to evolve and adapt to changing circumstances (Hernandez, 2019). This school of thought embraces uncertainty and change. It embodies holistic approaches to improve the situation across different scales and elements. Project Management in the Anthropocene era is about moving beyond sustainability. Project managers should foster diversity to ensure system adaptability, our projects should sync with natural systems. Projects should have positive contributions that improve the system's environment. It should foster resilience and innovation.

The P5 Impact Analysis and Sustainability Management Plan evaluates a project's effects and action to support the United Nation's Sustainable Development Goals (SDGs). It aligns organizational strategies with sustainable performance through principled project management techniques. P5 stands for People, Planet, Profit, Process and Product. (GPM, 2023) Its main purpose is to "identify potential impacts to sustainability, both positive and negative, that can be analyzed and presented to management to support informed decisions and effective resource allocation" (Green Project Management, 2019, p. 3). One of the ways

in which the execution of the project and its deliverables can contribute to sustainability is by using digital channels of communication to avoid traveling by car, thus reducing team members' carbon footprint. Another proposed response is to submit deliverables via email or through the school's Moodle platform as opposed to printing physical copies of each deliverable. The main domains of this project that relate to sustainability are the product and project management impacts. Because this study consists of only the creation of a project management plan, other impacts may not be applicable.

The FGP is to promote the principles of regenerative and sustainable development through the careful planning of project management. The deliverables that will be produced in the FGP will reflect the attributes of regenerative development by improving the system's environment, approaching the plans holistically seeing how the project can improve productivity. The plans will build system capacity to ensure that the units can digitalize application forms, flyers, and brochures to reduce wastage. The unit will meet virtually as much as possible to reduce the team's carbon footprint by avoiding traveling or hosting the team in larger spaces requiring air conditioning. The team will also avoid printing each deliverable. The design of the plans will be streamlined, removing redundancies which inhibit productivity. The indicators of success would be the reduction of paper purchased at the end of the fiscal year, the number of printables distributed and the number of clicks to the digital resources provided.

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Appendix 1: FGP Charter**CHARTER OF THE PROPOSED
FINAL GRADUATION PROJECT (FGP)**

1. Student name

Ingrid Acosta

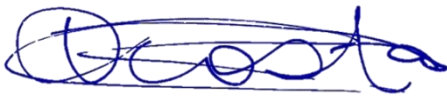
2. FGP name

Project Management Plan for the implementation of a Communication Campaign Strategy for Itz'at STEAM Academy.

3. Application Area (Sector or activity)

Education Sector

4. Student signature



5. Name of the Graduation Seminar facilitator

Roger Valverde Jimenez

6. Signature of the facilitator



7. Date of charter approval

February 26, 2023

8. Project start and finish date

January 9, 2023	June 9, 2023
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9. Research question

How can interest be generated in a newly established High school which presents innovative teaching pedagogy in Science, Technology, Engineering, Arts and Mathematics?

10. Research hypothesis

Is it possible to get seventy-five students to apply annually to Itz'at STEAM Academy by carrying out an extensive communication campaign about the school and its vanguard pedagogy?

11. General objective

General objective: To develop a project management plan for a communication campaign to ensure enrollment for the newly established Itz'at STEAM Academy in Belize.

12. Specific objectives

Specific objectives

1. To develop a project charter to define the key aspects of the communication campaign strategy required for implementation.
2. To develop a scope management plan to organize activities required into manageable phases for the execution of the communication campaign.
3. To elaborate a schedule management plan to ensure that all tasks are completed within the stringent period.
4. To develop a cost management plan to estimate the funds required for the different activities of the campaign.
5. To generate a quality management plan to define the specifications required for goods or non-consulting services to be procured as part of the campaign.
6. To outline a resource management plan to indicate the resources that will be used to implement the campaign.
7. To outline a communication management plan to relay timely and efficient messages among team members and stakeholders.
8. To formulate a risk management plan to minimize risks related to the project.
9. To propose a procurement management plan to identify the procurement method to source resources as defined by thresholds set by the funding agent.
10. To develop a stakeholder management plan to engage all the necessary stakeholders in creating and executing the communication plan for the Itz'at STEAM Academy.

13. FGP purpose or justification

The Government of Belize through the Ministry of Education, Culture, Science, and Technology (MoECST) invested the Education Quality Improvement Program- Phase II (EQIP II). The objective of the program is to improve the quality of education at the primary and secondary levels, with a special focus on innovation in Science, Technology, Engineering, Arts and Mathematics (STEAM) education. Component 2.1 is focused on the design and construction of the STEAM Laboratory School Infrastructure (Itz'at STEAM Academy) and is budgeted at USD 3.66 million. It is financed by the Inter-American Development bank, Counterpart Government funds and the Bank's Grant Facility.

The Itz'at STEAM Academy is the first-of-its-kind, secondary education institution being established in Belize. The school will be a model for providing individualized instruction to ensure that all students develop the skills necessary to be employable in digital transformation and innovation and STEAM subjects; and attain a high school Diploma. MoECST, through the Project Execution Unit, will lead the initiative to promote the school by implementing a Communication Campaign. The ministry has a communication officer who will work alongside the Project Coordinator to ensure that the Communication Strategy is deployed. The goal of the campaign is to get seventy-five students to enroll into the school by June 2023 within the first year of opening.

This is the first promotional campaign for a school that the ministry will embark on. The project management plans will assist to guide future promotional campaigns that are STEAM related. In the coming year, the government will expand the number of STEAM facilities available in the country. This investment will require a promotional campaign that will be similar in nature. The documents produced by this Final Graduation Project will serve as Organizational Process Assets for pipeline project: Skills for the Future Program.

14. Work Breakdown Structure (WBS). In table form, describing the main deliverable as well as secondary, products or services to be created by the FGP.

The Work Breakdown Structure for the Project Management Plan for the Itz'at STEAM Academy Communication Campaign Final Graduation Project is detailed below.

WBS	Task
1	Graduation Seminar
1.1	FGP Deliverables
1.1.1	Project Charter
1.1.2	WBS

1.1.3	Chapter I. Introduction
1.1.4	Chapter II. Theoretical framework
1.1.5	Chapter III. Methodological framework
1.1.6	Annexes
1.1.6.1	Bibliography
1.1.6.2	Schedule
1.2	Graduation Seminar approval
2	Tutoring process
2.1	Tutor
2.1.1	Tutor assignment
2.1.2	Communication
2.2	Adjustments of previous chapters (if needed)
2.3	Chapter IV. Development (Results)
2.3.1	Project Charter
2.3.2	Scope Management Plan
2.3.3	Schedule Management Plan
2.3.4	Cost Management Plan
2.3.5	Quality Management Plan
2.3.6	Resource Management Plan
2.3.7	Communication Management Plan
2.3.8	Risk Management Plan
2.3.9	Procurement Management Plan

2.3.10	Stakeholder Management Plan
2.4	Chapter V. Conclusions
2.5	Chapter VI. Recommendations
2.6	Chapter VII. Project validation in the regenerative and sustainable development
3	Reading by Reviewers
3.1	Reviewers' assignment request
3.1.1	Assignment of two readers
3.1.2	Communication
3.1.3	FGP submission to reviewers
3.2	Reviewers work
3.2.1	Reviewer one
3.2.1.1	FGP reading
3.2.1.2	Reader 1 report
3.2.2	Reviewer two
3.2.2.1	FGP reading
3.2.2.2	Reader 2 report
4	Adjustments
4.1	Report for reviewers
4.2	FGP update
4.3	Second review by reviewers
5	Presentation to Board of Examiners

5.1	Final review by board
5.2	FGP grade report

15. FGP budget

Since I am currently employed at the Project Execution Unit, there will be no cost incurred for travel expenses nor accessing the information via interviews. The cost associated with the FPG will be limited to the publishing of the applied research.

Item, Cost

Printing- \$100

Binding of FPG- \$100.00

Information Processing- \$350.00

16. FGP planning and development assumptions.

Four general assumptions for the development of the Final Graduation Project are that:

- i. Information about the Communication Campaign is organized and available.
- ii. There will be no limitation to use the information provided in the Communication Plan for Itz'at STEAM Academy.

- iii. Personnel at the Ministry of Education, Culture, Science and Technology will collaborate in the development of the plans to ensure alignment with organizational processes.
- iv. The project management plans will align with the project management responsibilities and the program operational manual acceptable to the Financing Agent.
- v. The development of the FGP will not interfere with other tasks assigned to the unit.

17. FGP constraints

Four constraints to consider during the development of the Final Graduation Project are the following:

- i. The plans that are created to manage the project must be in alignment with regulations set by the bank.
- ii. There is limited time for the development of the FGP since the project implementation will begin while the plans are being created.
- iii. The plans developed may not be embraced by the project execution unit or the Public Relations office since they are traditionally guided by other operational manuals.

- iv. The identity of the school, program offerings and operational procedures of the school are still being developed. It may delay the development of the plans that require these inputs.

18. FGP development risks

Risks associated with the development of a Project Management plan for the Final Graduation Project include the following:

- i. The need to promote the school may result in the plans not being implemented as designed, leading to a poorly executed communication campaign.
- ii. Poor stakeholder engagement may result in plans that do not take into consideration the needs of all parties involved and as such, issues on the execution of the campaign strategy will result in negative press.
- iii. Since the school is still under construction, overselling the school may be counterproductive resulting in low enrollment numbers.
- iv. The pedagogy of the school is too new for the current culture of the target audience resulting in low enrollment.

19. FGP main milestones

Milestones are related to deliverables on the second level (deliverables) and third level (control accounts) of the WBS of section 14 of this Charter. At the same time the deliverables are related to the specific objectives (in the case of the FGP please include the times for the tutorship reviews as well as for the readership).

Deliverable	Finish estimated date
1.1 FGP Appendix I and Appendix 5	15 th January, 2023
1.1.2 WBS completed	29 th January 2023
1.1.4 Chapter II Theoretical Framework	5 th February, 2023
1.1.5 Chapter III Methodological framework	12 February 2023
1.1.3 Chapter I Introduction complete	19 th February, 2023
1.2. Graduation Seminar Approval	26 th February 2023
2.1 Tutor Assignment	5 th March, 2023
2.3 Chapter IV: Development	12 th March, 2023
2.4 Chapter V Conclusions	19 th March, 2023
2.5 Chapter VI Recommendations	26 th March, 2023
2.6 Chapter VII Regenerative and Sustainable Development validation	2 nd April, 2023
3.0 Reader's review	30 th April, 2023
4.0 Adjustments based on reviewer's report	14 th May, 2023

4.4 Second Review by readers	28 th May, 2023
4.0 Board of examiners evaluation	11 th June, 2023
FGP End	25 th June, 2023

5.0 Theoretical framework

5.1 State of the “matter”

As part of the EQIP II procurement plan, a consulting service was to be procured for the communication campaign for the new Itz’at STEAM Academy being established as part of the EQIP II program. The Ministry has determined that it can successfully implement the Communication Campaign using the ministry’s resources. This approach will save substantial funds which can then be used to fund operational equipment for the school itself. The team that has been identified to plan and execute the campaign includes the Press Officer, Project Coordinator, Finance Specialist, Administrative Assistant, Science and Technology director and National School Portal Coordinator. The PEU’s administrative staff is familiar with some of these tools but does not practice using the tools as part of its daily operation.

There was no formal project management documentation prepared for this subcomponent of the EQIP II program. The MoECST, through the PEU, will be responsible for coordinating the individual activities associated with the campaign. The FGP project management plan will create the plans to manage scope, schedule, cost, quality, resource, communication, change requests, risks, and procurement management required for future ventures like this project. According to Rudder (2022), the project management plans will ensure that there is the commitment of

key experts to use the resources required to meet the timeline and stay within budget. It avoids the drawbacks of scope creep and gets the team motivated to avoid the risks associated with the failed project.

5.2 Basic conceptual framework

List of the basic concepts to be included in the document.

Examples: project management, Communication Strategies, Theory of Constraints, Parametric Estimating.

6.0 Methodological framework

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
To develop a project charter to	Communication	Secondary: POM and EQIP II	Qualitative. Written	Bibliographical files	The reference materials do not use the same

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
define the key aspects of the communication campaign strategy required for implementation.	Campaign Strategy	project documents Primary: field interviews.	information analysis.	Questionaries (SurveyMonkey, Google Forms) Semi-structured interviews	name or all the Project Management Knowledge areas as the PMBOK Guide.
To develop a scope management plan to organize activities required into	Work Breakdown Structure	Secondary: Herald Media Communication Strategy, PEU Annual	Qualitative. Written information analysis.	Semi-structured interviews.	The scope will be determined by the schedule and budget of the campaign.

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
manageable phases for the execution of the communication campaign.		Operating Plan (AOP) Primary: field interviews.			
To elaborate a schedule management plan to ensure that all tasks are completed within the	Milestone list	Secondary: Herald Media Communication Strategy, PEU Annual Operating Plan (AOP),	Qualitative. Written information analysis.	Google calendar, MS Projects	The schedule of the campaign will be determined by the Academic Calendar so that the students can be engaged in a recruitment process.

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
stringent time frame.		Practice Standard for Scheduling. Primary: field interviews.			
To develop a cost management plan to estimate the funds required for the different activities of	Draft Budget	Secondary: PEU MoECST Procurement Plan, Project Documents.	Qualitative. Written information analysis.	Excel sheets	The budget of the campaign is fixed based on the budgeted project funds.

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
the campaign.		Primary: field interviews.			
To generate a quality management plan to define the specifications required for goods or non-consulting services to be procured as part of the campaign.	RACI Chart	Secondary: PEU MoECST Procurement Plan, Project Documents. Primary: field interviews.	Qualitative. Written information analysis.	Communication Plan and Brand Guidelines	The quality will be accepted by the team leads for the different activities. The Press Officer is the one with the most responsibility here.

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
To outline a resource management plan to indicate the resources that will be used to implement the campaign.	Shared Calendar	Secondary: PEU MoECST Procurement Plan, Project Documents. Primary: field interviews.	Qualitative. Written information analysis.	Excel	The team is comprised of people from a cross section of units with limited time available for the communication campaign.
To outline a communication management plan to	Calendar Invites. Chat Group, Emails	Secondary: Project Documents and MoECST	Qualitative. Written information analysis.	Google Calendar, WhatsApp, Gmail	The communication plan for the communication campaign is equally

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
<p>relay timely and efficient messages among team members and stakeholders.</p>		<p>Communication Plan.</p> <p>Primary: field interviews.</p>			<p>important. Most of the communication is expected to be top-down, making it difficult to incorporate the needs of stakeholders.</p>
<p>To formulate a risk management plan to minimize risks</p>	<p>Risk Matrix</p>	<p>Secondary: Project Documents and MoECST Communication Plan.</p>	<p>Qualitative. Written information analysis.</p>	<p>Excel</p>	<p>Risk Matrix is rarely used in the PEU despite its importance. It will need to be updated and referenced regularly.</p>

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
related to the project.		Primary: field interviews.			
To propose a procurement management plan to identify the procurement method to source resources as defined by thresholds	Procurement Documents	Secondary: Project Documents, IDB Procurement of Goods and services. Primary: field interviews.	Qualitative. Written information analysis.	Excel	The process will be determined by the IDB, financial Agent.

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
set by the funding agent.					
To develop a stakeholder management plan to engage all the necessary stakeholders in creating and executing the communication	Engagement Strategy Report, Stakeholder mapping exercise.	Secondary: MoECST Communication Plan. Primary: field interviews.	Qualitative. Written information analysis.	Commercials, advertisements, Parent-Teacher Meetings, Pop-up Shops, Fairs, etc.	The main stakeholders must be the potential students, but the parents are the ultimate decision makers for the selection of the school. Interaction with parents will be limited throughout the campaign.

Objective	Name of deliverable	Information sources	Research method	Tools	Restrictions
tion plan for the Itz'at STEAM Academy.					

7.0 Validation of the work in the field of regenerative and sustainable development.

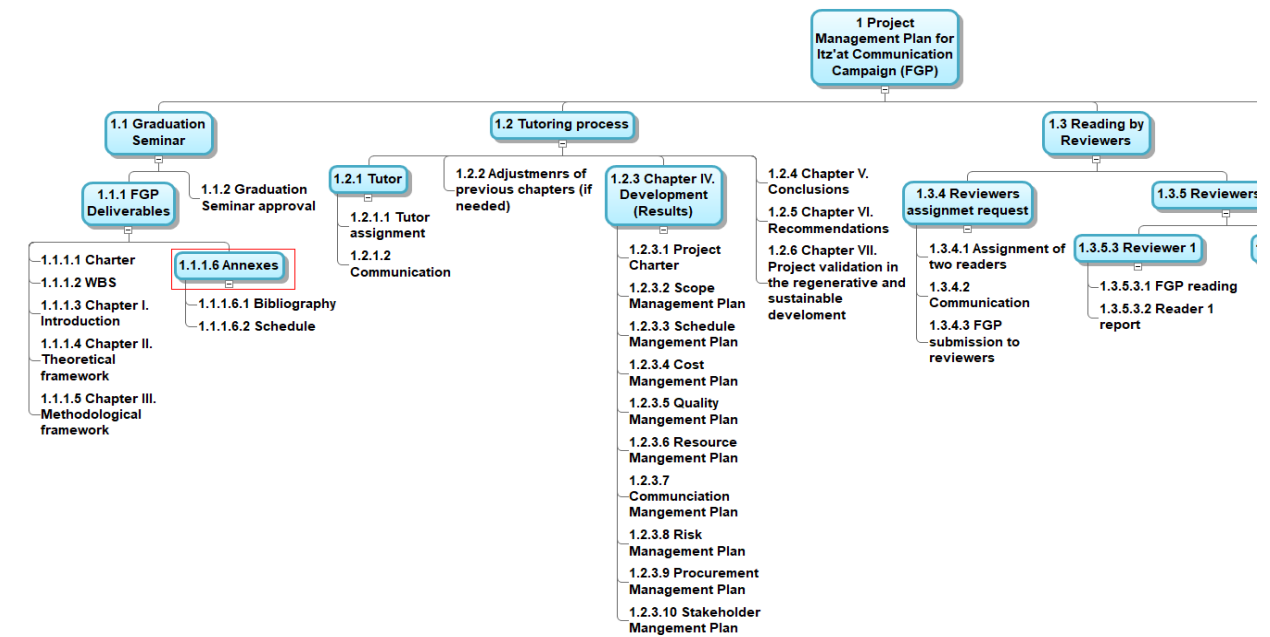
The FGP is to promote the principles of regenerative and sustainable development through the careful planning of project management. The deliverables that will be produced in the FGP will reflect the attributes of regenerative development by improving the system's environment, approaching the plans holistically seeing how the project can improve productivity. The plans will build system capacity to ensure that the units can digitalize application forms, flyers, and brochures to reduce wastage. The unit will meet virtually as much as possible to reduce the team's carbon footprint by avoiding travelling or hosting the team in larger spaces requiring air conditioning. The team will also avoid printing each deliverable. The design of the plans will be streamlined, removing redundancies which inhibit productivity. The indicators of success would be the reduction of paper purchased at the end of the fiscal year, the number of printables distributed and the number of clicks to the digital resources provided.

Appendix 2: FGP WBS

Figure 1

Work breakdown structure for Final Graduation Project as presented for the Course work.

(Source, the Author)



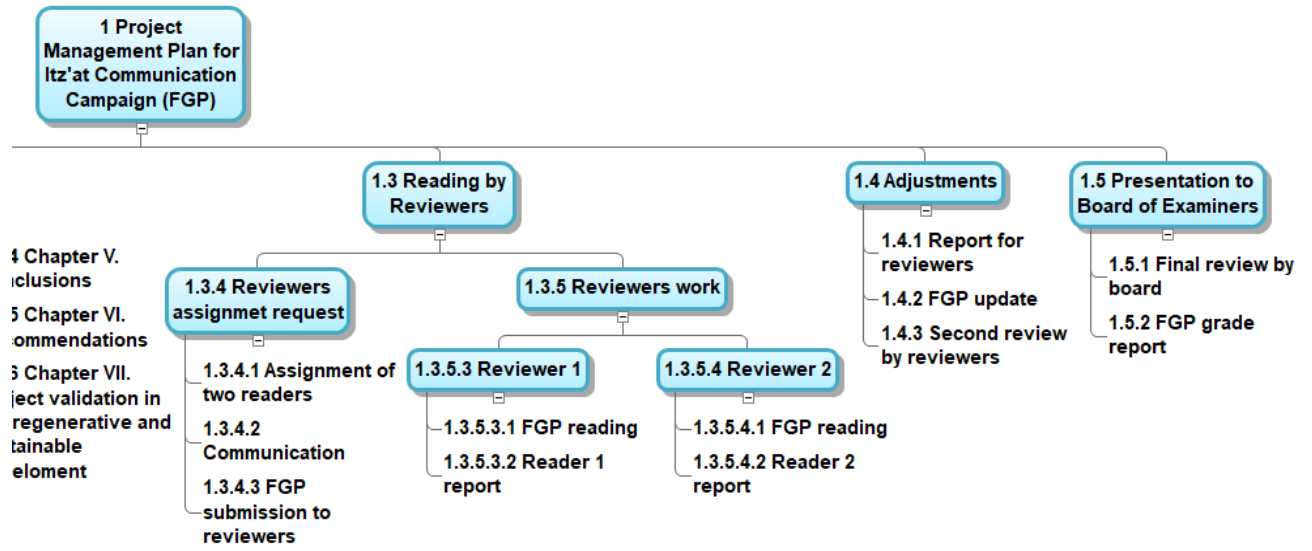
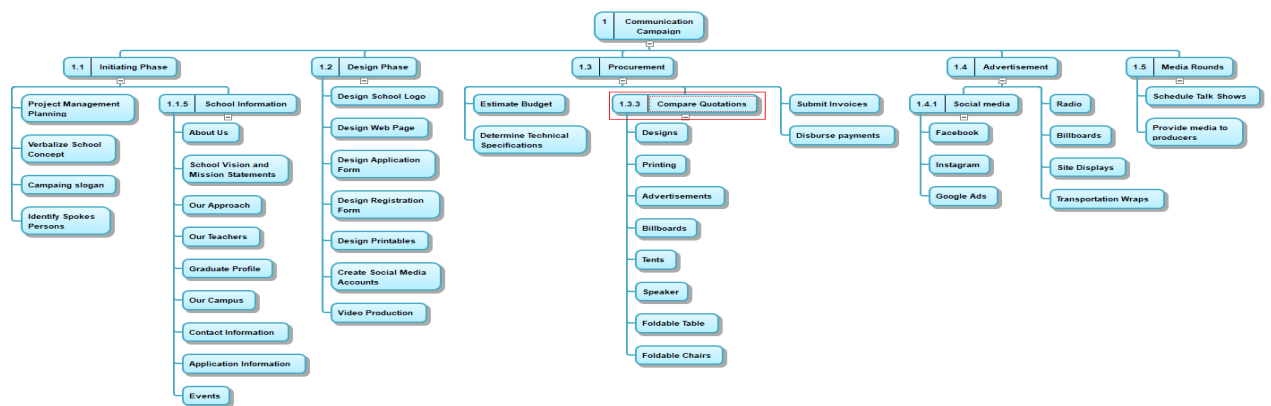


Figure 2 Work Breakdown structure for the implementation of the Communication Campaign for Itz'at STEAM Academy

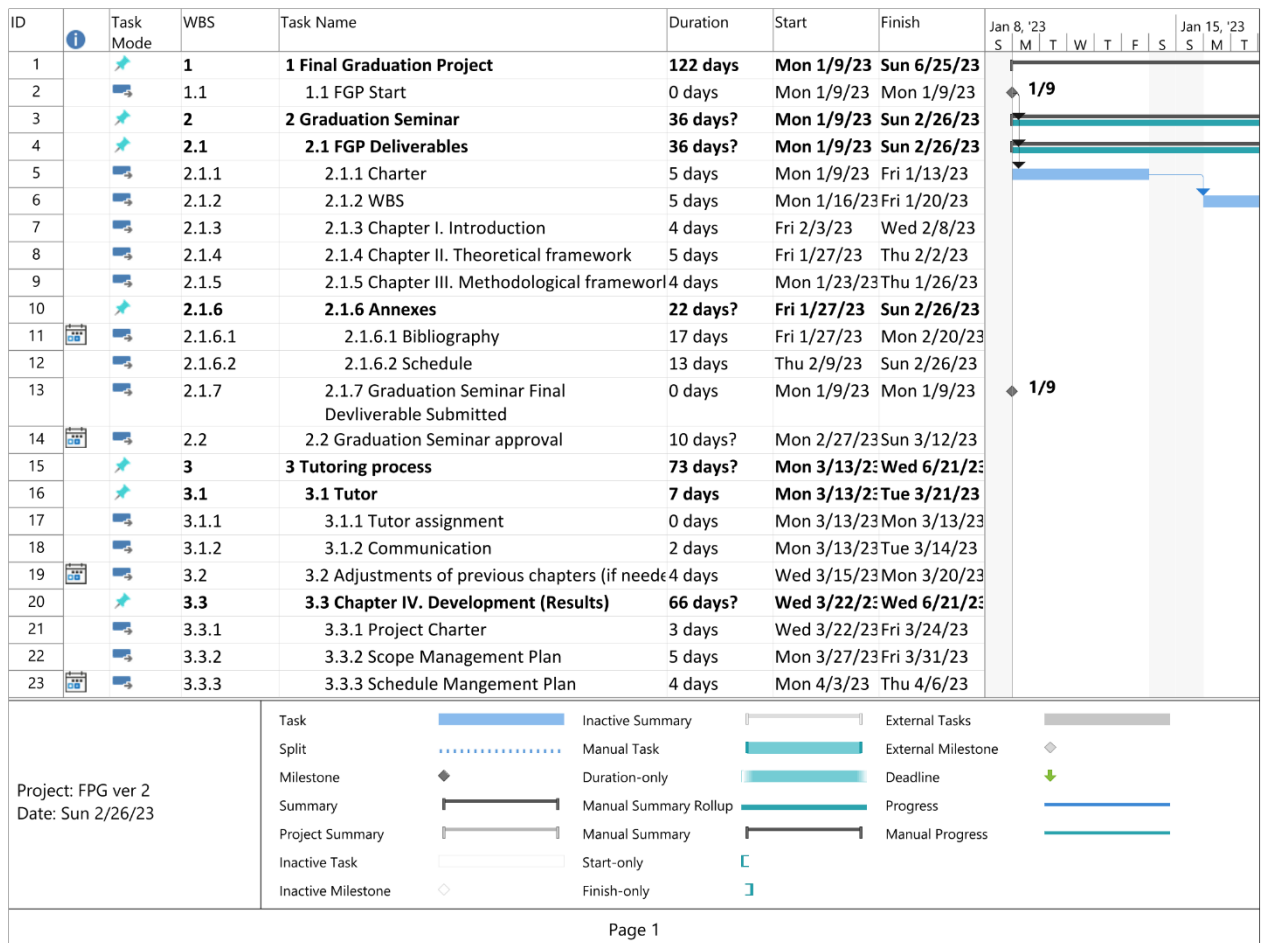


[Link to work breakdown structure for Itz'at STEAM Academy on MS Projects](#)

Appendix 3: FGP Schedule

Figure 3

Schedule for the completion of the Final graduation Project (Source, the Author)



ID	Task Mode	WBS	Task Name	Duration	Start	Finish	Jan 8, '23							Jan 15, '23						
							S	M	T	W	T	F	S	S	M	T	W	T	F	S
24		3.3.4	3.3.4 Easter Break	0 days	Tue 4/11/23	Tue 4/11/23														
25		3.3.5	3.3.5 Cost Mangement Plan	3 days	Wed 4/12/23	Fri 4/14/23														
26		3.3.6	3.3.6 Quality Mangement Plan	5 days	Mon 4/17/23	Fri 4/21/23														
27		3.3.7	3.3.7 Resource Mangement Plan	5 days	Mon 4/24/23	Fri 4/28/23														
28		3.3.8	3.3.8 Communciation Mangement Plan	5 days	Mon 5/1/23	Fri 5/5/23														
29		3.3.9	3.3.9 Risk Management Plan	5 days	Mon 5/8/23	Fri 5/12/23														
30		3.3.10	3.3.10 Procurement Management Plan	5 days	Mon 5/15/23	Fri 5/19/23														
31		3.3.11	3.3.11 Stakeholder Mangement Plan	5 days	Mon 5/22/23	Fri 5/26/23														
32		3.4	3.4 Chapter V. Conclusions	2 days	Mon 5/29/23	Tue 5/30/23														
33		3.5	3.5 Chapter VI. Recommendations	2 days	Wed 5/31/23	Thu 6/1/23														
34		3.6	3.6 Chapter VII. Project validation in the regenerative and sustainable development	5 days	Fri 6/2/23	Thu 6/8/23														
35		3.7	3.7 Tutor Approval	0 days	Thu 6/8/23	Thu 6/8/23														
36		4	4 Reading by Reviewers	12 days?	Fri 6/9/23	Mon 6/26/23														
37		4.1	4.1 Reviewers assignmet request	1 day	Thu 6/8/23	Fri 6/9/23														
38		4.1.1	4.1.1 Assignment of two readers	0 days	Thu 6/8/23	Thu 6/8/23														
39		4.1.2	4.1.2 Communication	1 day	Fri 6/9/23	Fri 6/9/23														
40		4.1.3	4.1.3 FGP submission to reviewers	0 days	Fri 6/9/23	Fri 6/9/23														
41		4.2	4.2 Reviewers work	12 days	Thu 6/8/23	Fri 6/23/23														
42		4.2.1	4.2.1 Reviewer 1	6 days	Thu 6/15/23	Thu 6/22/23														
43		4.2.1.1	4.2.1.1 FGP reading	5 days	Thu 6/15/23	Wed 6/21/23														
44		4.2.1.2	4.2.1.2 Reader 1 report	1 day	Thu 6/22/23	Thu 6/22/23														
45		4.2.2	4.2.2 Reviewer 2	6 days	Mon 6/12/23	Mon 6/19/23														
46		4.2.2.1	4.2.2.1 FGP reading	5 days	Fri 6/23/23	Thu 6/29/23														

Project: FPG ver 2 Date: Sun 2/26/23	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	
	Milestone		Duration-only		Deadline	
	Summary		Manual Summary Rollup		Progress	
	Project Summary		Manual Summary		Manual Progress	
	Inactive Task		Start-only			
Inactive Milestone		Finish-only				

Page 2

ID	Task Mode	WBS	Task Name	Duration	Start	Finish	Jan 8, '23							Jan 15, '23				
							S	M	T	W	T	F	S	S	M	T		
47		4.2.2.2	4.2.2.2 Reader 2 report	1 day	Fri 6/30/23	Fri 6/30/23												
48		5	5 Adjustments	10 days	Wed 6/14/23	Tue 6/27/23												
49		5.1	5.1 Report for reviewers	2 days	Mon 7/3/23	Tue 7/4/23												
50		5.2	5.2 FGP update	2 days	Wed 7/5/23	Thu 7/6/23												
51		5.3	5.3 Second review by reviewers	5 days	Fri 7/7/23	Thu 7/13/23												
52		5.4	5.4 FGP grade report	1 day	Fri 7/14/23	Fri 7/14/23												
53		6	6 FPG End	0 days	Fri 7/14/23	Fri 7/14/23												

Project: FPG ver 2 Date: Sun 2/26/23	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	
	Milestone		Duration-only		Deadline	
	Summary		Manual Summary Rollup		Progress	
	Project Summary		Manual Summary		Manual Progress	
	Inactive Task		Start-only			
	Inactive Milestone		Finish-only			

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Appendix 4: Preliminary bibliographical research

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Reasons for selected references:

1. This document was prepared outlining some strategies for the communication campaign to be implemented.
2. Outlines important project governance components that will be useful in setting the tone for the project.
3. This source was used to determine how to create the work breakdown structure for Deliverable 2.
4. Explains how to write SMART objectives.
5. Great breakdown in steps for stakeholder engagement.
6. The document provides the threshold for the procurement method that is to be selected for the project.
7. The procurement method selected for the goods will be determined by the guidelines provided by the funding agent.

8. PMI practice standard for scheduling is the authority on how to create the schedule management plan.
9. Quick reference to a Communication Management Plan example in table format.
10. The approach to the implementation of this project must incorporate agile methodology.
There would be many moving parts. The source touches on stakeholder management.

Appendix 5: Revision Dictum

MARIO EMIL CANO

FREELANCE EDITOR

FORMER TEACHER OF ENGLISH A&B (2006 – 2016)

BACHELOR DEGREE IN ENGLISH

SPALDING UNIVERSITY, LOUISVILLE, KENTUCKY

Dear Academic Advisor,

Ref: Thorough Review and Proofreading of Final Graduation Project submitted by Ingrid Andrea Acosta in partial fulfillment of the requirements for the Masters Degree

I hereby confirm that Ingrid Andrea Acosta has made all the corrections to the Final Graduation Project document as I have advised. In my opinion, the document now meets the literary and linguistic standards expected of a student for a degree in the Masters level.



Mario Emil Cano

Freelance Editor

Former Teacher of English A&B