

UNIVERSITY OF  
WATERLOO



&



TEACHERS WITHOUT FRONTIERS

استاد تاحد

### **Project Management Plan**

**Group – 3 Mathematics and English for Grade 3**  
Providing Online Materials for Teachers in Pakistan

Course Instructor - Dr. Peter Carr  
Date - 1st May 2020

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## **1. Introduction**

This document clearly defines how we accomplish to source the online teaching material for the grade 3 Mathematics and English subjects for teachers under the initiative teachers without frontiers in Pakistan.

The reason for submitting this document is to provide a better understanding in accomplishing the TWS Grade 3 English and Mathematics project by preparing a draft project management plan which covers the following aspects;

- What shall be the roles and responsibilities of each team member?
- How do we monitor our progress in succeeding?
- How do we plan, schedule and execute this project?
- How do we communicate with each other internally as well as externally to the clients and other stakeholders?

In this document we tried our best to focus on our goal and a draft project management plan of managing the project has been made. Further, the plan is elaborated in this document in section 2(Project Scope and Objectives) which comprises of scope and objectives which indicates us about the work which is required to accomplish the given project on time and boundaries have been set accordingly so as to not to deviate from the plan proposed. In section 3(Project schedule and Management plan) we defined tasks/activities based on the allocation of work to the respective team members. In section 4(Quality Management plan) quality standards were defined and steps of quality assessment were stated. In section 5(Communication Management plan) we described how the communication plays a major role in terms of completion of the project and how and when the communication is needed most. In section 6(Change Management plan) & 7(Risk Management plan) we described the steps for change management while executing the project and to tackle if there's any potential risk that needs to be addressed. In section 8(Research and Development plan), finding of right resources, research about the information, planning, and implementing new programs and protocols into Grade 3 has been proposed. In section 9(Human Resource Management Plan). We defined the roles and responsibilities required to accomplish this project accordingly.

This plan is a cumulative effort of each member of the team as a whole to execute the project as per the guidelines of the professor, clients and other stakeholders for the successful completion of the project. Thereafter, after following the steps discussed in this draft plan precisely, we submit our final report to the professor for evaluation.

## **2. Project Scope & Objectives**

### **2.1 Definition of Scope**

This section includes all the necessary steps to execute the project for successful completion on time. It is very crucial to define a proper scope for the project, if not the project might deviate from

reaching its goal due to improper definition of the scope in this plan. The plan proposed here after maintains an equilibrium between the inputs given by the professor, processes required to complete the project along with accurate outcomes and objectives to be delivered.

### ***2.1.1 Project Objectives***

Our main motto of this project management plan draft is to deliver clients/sponsors/professor the most resourceful content to the associated people in Pakistan under “Teachers without Frontiers” initiative as it can nurture the lives of young children in the country. It's a great pleasure working for this project as it serves a great cause and we are confident enough that our efforts on this project shall result in a great change in the living standards of the country. We would also ensure that all the data submitted shall be legit considering the latest curriculum of Pakistan. All the necessary outcomes have been stated below.

- Finding resources that satisfies the course requirements and matches the curriculum and providing highly engaging material and catches student’s attention. The factors considered are that the information is easy to understand without compromising the quality. It can have knowledge check quotients here and there, it has colorful pictures (as we are dealing with Grade 3 students), Games related to the subjects involving particular topics in them and many more.
- The resources provided shall be focused not on a student's perspective but also teachers. Resources are provided for teachers on how to motivate or strive for impactful learning outcomes from students. Resources about how lectures can be strategically planned to keep in mind strength & weakness of each student will be provided to make it easier for teachers.
- Only the relevant links are to be provided at the end by sorting all the URLs such that the ones which contains irrelevant advertisements will be removed and also the ones which doesn’t have any tunable information with the curriculum of Pakistan will be removed, so that students do not get deviated from it. This is how we tried to enrich the given materials so that the teachers and students in Pakistan are beneficial.
- To add upon in such uncertain pandemic situations like COVID-19, by providing all of these will automatically adapt to the new learning methodology known to be e-learning.

### ***2.1.2 Project Boundaries***

These are to be defined so that the project deliverables won’t slip out of the way from the product to be delivered to the clients/sponsors/professor.

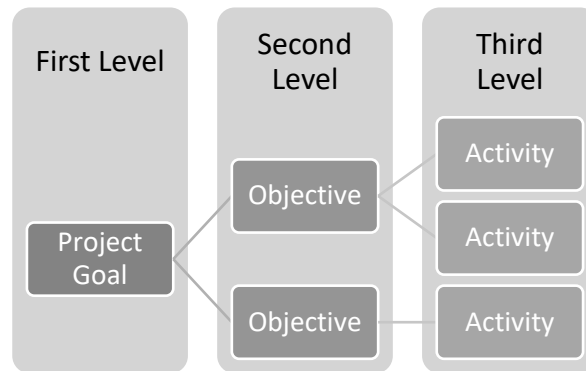
The Boundaries to be considered are:

- Providing URLs to the client such that the URLs can be accessible through mobiles and tablets as well, apart from desktop/laptops only.
- Providing Resource full materials to the Pakistani schools that are not only appropriate but also efficient.
- Providing materials/information to the teachers and students in the form of URL links which doesn’t have any payment requirements to view the content.

- Providing not only the desired information along with techniques attract the students to nourish their minds. We address this by providing some games, assessments such that they won't break the links to the topics taught.
- Provide the information from the trusted sources which have better information and won't degrade in terms of quality.
- We shall report our plan and progress in the form of Project management draft plan, aft plan, weekly status reports, final report, spreadsheets (used for mapping URLs), and any annexures if necessary.

### ***2.1.3 Work Breakdown Structure***

In this section it describes how the work has been distributed to achieve the ultimate goal of providing resourceful, engaging, efficient material to the TWS which is illustrated below. in



The team comprising of 9 members have been divided into designated roles and respective responsibilities have been given to them to complete the smaller chunks (tasks). All the necessary changes to any of the task/objective/activity will be done by the approval of the manager and the client. The teams and their work have been stated below

- The Research & Development team has a major responsibility of finding the appropriate resources from the web.
- The Quality Management team has the responsibility for setting standards for the project and performing quality checks to the resources found by the R&D team.
- The Risk & Change Management team has the responsibility of assessing the risk associated for the resources we use, such that they violate any rules. Change management team is responsible for any dynamic changes needed to be done while the process is happening.
- The Communication team has the responsibility of maintaining communication internally with the team as well as externally with the sponsors/clients/professor by providing them the weekly status report by project manager's approval if necessary.

- The Project Manager is responsible for maintaining the communication in between the client/sponsor/professor to make some dynamic changes if necessary and also monitors the progress of each department by getting weekly reports from them for the work assigned.

Note: The approved URLs have been updated by all the team members irrespective of the designated roles and responsibilities. The weekly distribution of the tasks in detail have been stated in further sections.

#### ***2.1.4 Project Deadline***

The deadline proposed by the sponsor/client/professor is 31<sup>st</sup> July 2020 and the deadlines of the project are necessary to plan and distribute the work accordingly to complete the outcome within the deadline proposed.

### **2.2 Agile Framework**

#### ***2.2.1 Definition of Agile***

Agile is a process by which a team can manage a project by breaking it up into several stages and involving constant collaboration with stakeholders and continuous improvement and iteration at every stage. It uses short development cycles called “sprints” to focus on continuous improvement in the development of a project.

#### ***2.2.2 Benefits of Agile***

Agile can help ensure project-wide process and methodological alignment. In terms of project management agile provide:

- Increased flexibility
- Increased productivity
- Increased transparency
- Higher quality deliverables
- Decreased risk of missed objectives

#### ***2.2.3 Agile Project Management Software***

As we want to work on mixed agile methodologies by leveraging a gear towards agile project development, we choose **Atlassian Jira + Agile** as an Agile project management tool that supports(Scrum ,Kanban and other methodologies) and this project management software comes with a comprehensive set of tools that help Scrum teams perform events with ease.

#### ***2.2.4 Key Roles and Responsibilities as a Scrum Team***

**Sprint planning:** The work to be performed (scope) during the current sprint is planned during this meeting by the entire team. This meeting is led by the scrum master and is where the team decides on the sprint goal.

**Sprint:** A sprint is the actual time period when the scrum team works together to finish an increment. Two weeks is a pretty typical length for a sprint to deliver a valuable increment

**Daily Scrum or Stand Up:** This is a daily short meeting that happens at the same time. The goal of the daily scrum is for everyone on the team to be on the same page, aligned with the sprint goal

**Sprint retrospective:** The retrospective is where the team comes together to document and discuss what worked and what didn't work in a sprint. The idea is to create a place where the team can focus on what needs to be improved for the next time.

### ***2.2.5 Major Roles for Agile Project Success:***

#### ***2.2.5.1 Product owner***

Focuses on understanding business, customer, and resource requirements, then prioritizing the work to be done by the complete team accordingly. Effective product owners:

- Build and manage the product backlog.
- Closely partner with the team to ensure everyone understands the work items in the product backlog.
- Give the team clear guidance on which features to deliver next.

#### ***2.2.5.2 Scrum Master***

The Scrum master coach teams and product owners on the scrum process, and look for ways to fine-tune their practice in project management, we are following **Rotating scrum master methodology** (members of a team rotate scrum master responsibilities primarily amongst each other for every sprint). Scrum masters often perform some or all of the following activities:

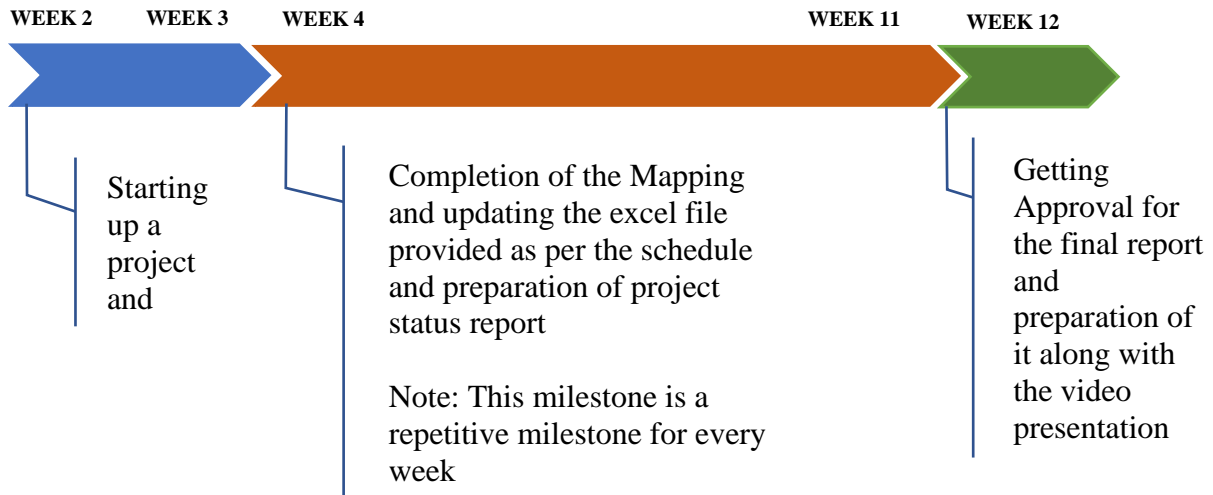
- Stand-ups - Facilitate daily stand-ups (or the daily scrum) as needed.
- Iteration/sprint planning meetings – Aim in estimation and sub task creation.
- Sprint reviews – Participate in the meeting and capture feedback.
- Retrospectives – Note areas for improvement and action items for future sprints.
- Board administration – Work as the administrator of the Scrum board on Jira platform. Ensure that cards are up to date and the scrum tool.

#### ***2.2.5.3 Scrum Team***

The scrum team drives the plan for each sprint. They forecast how much work they believe they can complete over the iteration. Team members have different skill sets, and cross-train each other so no one person becomes a bottleneck in the delivery of work. All members of the team help one another to ensure a successful sprint completion.

## **3. Project Milestones and Major Activities**

The Project plan is scheduled on daily basis describing all activities, these are assigned and shall be delivered based on role and responsibilities of team members of our project. We started our project meeting with a kickoff meeting dated 22nd May 2020 and based on the outcome of that meeting we planned our milestones and plan accordingly. Following illustrates our project flow.



The following table illustrates and describes our plan along with schedule for daily activities from 22<sup>nd</sup> May to 31<sup>st</sup> July 2020. Also, please find the for detailed Gantt Chart of our project.

Project Name	Project duration in days	Project Start Date	Project finish date
Group – 3 Mathematics and English for Grade 3	70	May 22, 2020	July 31, 2020

Activity Id	Activity	Duration	Start Date	Finish Date
1	Kick off meeting for organising team and assigning roles and responsibilities	2	May 22, 2020	May 24, 2020
2	Distribution of work for the team members regarding project management plan and preparation of the project management plan	7	May 25, 2020	June 1, 2020
3	Submission of project management plan and Team Organisation for attending the meeting with Professor	1	June 1, 2020	June 2, 2020
4	working on the comments given by the professor by risk assessment and change management team in	1	June 2, 2020	June 3, 2020



	coordination with other team members			
5	Finding resources for English and Mathematics by R&D team Unit 1	2	June 3, 2020	June 5, 2020
6	Quality check by Quality management team for Mathematics and English Unit 1 and getting for project manager's approval	1	June 5, 2020	June 6, 2020
7	risk assessment check by Risk assessment and change management team for Mathematics and English Unit 1 and getting for project manager approval	1	June 5, 2020	June 6, 2020
8	Updating the approved Mathematics and English Unit 1 links in the library by all team members	1	June 6, 2020	June 7, 2020
9	Preparation of the weekly status report for the week and submission to professor by communication team along with project manager	1	June 7, 2020	June 8, 2020
10	working on the comments given by the professor by risk assessment and change management team in coordination with other team members	1	June 9, 2020	June 10, 2020
11	Finding resources for English and Mathematics by R&D team Unit 2	2	June 10, 2020	June 12, 2020
12	Quality check by Quality management team for Mathematics and English Unit 2 and getting for project manager's approval	1	June 12, 2020	June 13, 2020
13	risk assessment check by Risk assessment and change management team for Mathematics and English Unit 2 and getting for project manager approval	1	June 12, 2020	June 13, 2020

14	Updating the approved Mathematics and English Unit 2 links in the library by all team members	1	June 13, 2020	June 14, 2020
15	Preparation of the weekly status report for the week and submission to professor by communication team along with project manager	2	June 14, 2020	June 16, 2020
16	working on the comments given by the professor by risk assessment and change management team in coordination with other team members	1	June 16, 2020	June 17, 2020
17	Finding resources for English and Mathematics by R&D team Unit 2	2	June 17, 2020	June 19, 2020
18	Quality check by Quality management team for Mathematics and English Unit 2 and getting for project manager's approval	1	June 19, 2020	June 20, 2020
19	risk assessment check by Risk assessment and change management team for Mathematics and English Unit 2 and getting for project manager approval	1	June 19, 2020	June 20, 2020
20	Updating the approved Mathematics and English Unit 2 links in the library by all team members	1	June 20, 2020	June 21, 2020
21	Preparation of the weekly status report for the week and submission to professor by communication team along with project manager	2	June 21, 2020	June 23, 2020
22	working on the comments given by the professor by risk assessment and change management team in coordination with other team members	1	June 23, 2020	June 24, 2020
23	Finding resources for English and Mathematics by R&D team Unit 3	2	June 24, 2020	June 26, 2020
24	Quality check by Quality management team for Mathematics and English	1	June 26, 2020	June 27, 2020

	Unit 3 and getting for project manager's approval			
25	risk assessment check by Risk assessment and change management team for Mathematics and English Unit 3 and getting for project manager approval	1	June 26, 2020	June 27, 2020
26	Updating the approved Mathematics and English Unit 3 links in the library by all team members	1	June 27, 2020	June 28, 2020
27	Preparation of the weekly status report for the week and submission to professor by communication team along with project manager	2	June 28, 2020	June 30, 2020
28	working on the comments given by the professor by risk assessment and change management team in coordination with other team members	1	June 30, 2020	July 1, 2020
29	Finding resources for English and Mathematics by R&D team Unit 4	2	July 1, 2020	July 3, 2020
30	Quality check by Quality management team for Mathematics and English Unit 4 and getting for project manager's approval	1	July 3, 2020	July 4, 2020
31	risk assessment check by Risk assessment and change management team for Mathematics and English Unit 4 and getting for project manager approval	1	July 3, 2020	July 4, 2020
32	Updating the approved Mathematics and English Unit 4 links in the library by all team members	1	July 4, 2020	July 5, 2020
33	Preparation of the weekly status report for the week and submission to professor by communication team along with project manager	2	July 5, 2020	July 7, 2020

34	working on the comments given by the professor by risk assessment and change management team in coordination with other team members	1	July 7, 2020	July 8, 2020
35	Finding resources for English and Mathematics by R&D team Unit 5	2	July 8, 2020	July 10, 2020
36	Quality check by Quality management team for Mathematics and English Unit 5 and getting for project manager's approval	1	July 10, 2020	July 11, 2020
37	risk assessment check by Risk assessment and change management team for Mathematics and English Unit 5 and getting for project manager approval	1	July 10, 2020	July 11, 2020
38	Updating the approved Mathematics and English Unit 5 links in the library by all team members	1	July 11, 2020	July 12, 2020
39	Preparation of the weekly status report for the week and submission to professor by communication team along with project manager	2	July 12, 2020	July 14, 2020
40	working on the comments given by the professor by risk assessment and change management team in coordination with other team members	1	July 14, 2020	July 15, 2020
41	Finding resources for English and Mathematics by R&D team Unit 6	2	July 15, 2020	July 17, 2020
42	Quality check by Quality management team for Mathematics and English Unit 6 and getting for project manager's approval	1	July 17, 2020	July 18, 2020
43	risk assessment check by Risk assessment and change management team for Mathematics and English Unit 6 and getting for project manager approval	1	July 17, 2020	July 18, 2020

44	Updating the approved Mathematics and English Unit 6 links in the library by all team members	1	July 18, 2020	July 19, 2020
45	Preparation of the weekly status report for the week and submission to professor by communication team along with project manager	2	July 19, 2020	July 21, 2020
46	working on the comments given by the professor by risk assessment and change management team in coordination with other team members	1	July 21, 2020	July 22, 2020
47	Finding resources for Unit 7&8 of English and Unit 7 of Mathematics by R&D team	2	July 22, 2020	July 24, 2020
48	Quality check by Quality management team for Mathematics Unit 7 and English Unit 7 and Unit 8 getting for project manager's approval	1	July 24, 2020	July 25, 2020
49	risk assessment check by Risk assessment and change management team for Mathematics Unit 7 and English Unit 7 and unit 8 and getting for project manager approval	1	July 24, 2020	July 25, 2020
50	Updating the approved Mathematics Unit 7 and English Unit 7 and unit 8 links in the library by all team members	1	July 25, 2020	July 26, 2020
51	Preparation of the weekly status report for the week and submission to professor by communication team along with project manager	2	July 26, 2020	July 28, 2020
52	Preparation of final report	2	July 28, 2020	July 30, 2020
53	Review and submission of final report	1	July 30, 2020	July 31, 2020

## Milestones

## 4. Quality Management Plan

### 4.1 Purpose

Quality management is not an event - it is a process; a constantly high-quality product or facility cannot be formed by an imperfect process. It is a repetitive sequence of determining quality, bring up-to-date processes, measuring, updating developments until the anticipated quality is achieved. The purpose of our project is to achieve deliverables of high quality that meets the requirement criteria of TWF program which helps them in setting a better teaching curriculum to lead the students in a desirable direction.

### 4.2 Principles of Quality Management

It is very important that standards for our quality management plan are set by listing some important principles which will be used to get improved performance:

- **Customer Focus**

Meet and exceed customer expectations. When business procedures are well-organized, quality is advanced, and more customers can be satisfied. Our focus in this project is to plan high quality and that meets the client needs and expectations.

- **Leadership**

Provide purpose to the employees, give direction and engagement to the workforce. Project Manager will lay the big plan for our common purpose and set weekly milestones for each team-member to complete by the end of that week.

- **Engagement of People**

Workforce involvement is another important principle. This principle also contains empowering the staffs, including them in decision making and recognizing their achievements and enrichment of their skills and knowledge. All the major decisions in our project will be taken by having everyone's equal word on it.

- **Process Approach**

Understand processes to optimize the performance. This method emphasizes on attaining efficiency and effectiveness in the organizational processes. The work done will go under proper quality screening to check the effectiveness and checking maximum productivity is achieved in the given time frame for better efficiency.

- **Improvement**

To uphold existing performance and to make new opportunities to be actively involved in continuous improvement. Once assessment of the work has been done, required changes will be made to withhold the quality standards.

- **Evidence-based Decision Making**

Facts, evidences and data analysis for decision making. Which is based on the performance of tasks that produce wanted results and even justify the previous decisions. We will make sure that all the URLs in the resources are appropriate and precise and add URLs that matches all the criteria and is from a trusted source.

- **Relationship Management**

Manage relationship with involved parties to improve performance. When an organization is able to maintain its relationship with interested parties well, it is more likely to accomplish continuous business alliance. All the meetings with client that will be uploaded on learn will be taken under high consideration to establish that we are on right track and our focus of the project matches the client's expectation.



### 4.3 Quality Management Architecture:

Quality management Architecture comprises of four significant components as follows:

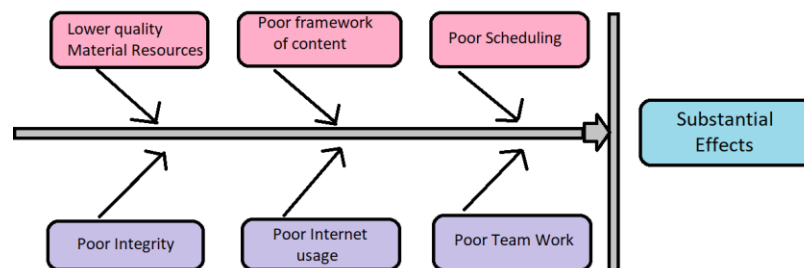
- **Quality Planning** – The method of identifying the quality standards applicable to the project and determining how to meet them. Customer satisfaction is be kept in mind while planning this part of the project and the screening of the document will be done accordingly.
- **Quality Assurance** – The organized actions essential to offer enough reliability that a certain service or product will meet the stated requirements.

Process Action	Acceptable Process Standards	Stages for review	Assessment Interval
Project Plan Establishment	Synchronized with the template provided	Self- Review Team- Review Quality Manager Review	(3 times a week) Start of the week,

		Project Manager Review	Mid-week and End of the week
Project Status Report	Synchronized with the weekly project status report template	Team- Review Quality Manager Review Project Manager Review	(2 time a week) Mid-week and before submission
Final Project Report	Synchronized with Final Report Template	Self- Review Team- Review Quality Manager Review Project Manager Review	3 time a week in the last month and by the end of last month
Final Project Presentation	Synchronized with Final Project Report	Team- Review Quality Manager Review Project Manager Review	3 times in the last 2 weeks and in the end of the last month

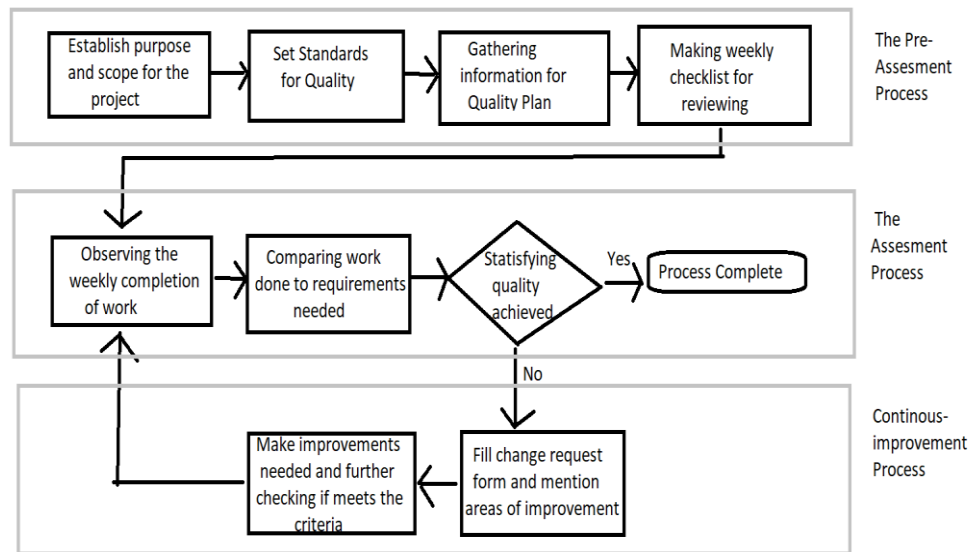
The goal is to make sure that excellence is essential in each step of the process. Quality assurance also helps to regulate whether provided product or service is suitable for the time and situations.

- **Quality Control** – The ongoing determination to maintain a process’s integrity and reliability in accomplishing an outcome. Many techniques and tools are available to control of the work done. Here we have used Fishbone diagram where we were encouraged to find major defects that may result in poor quality of the final work.



- **Quality Improvement** – The focused change of a process to improve the assurance or reliability of the outcome. Here we have listed a flowchart about how quality improvement is going to be incorporated in our plan,





In relevance to the above flow chart we can divide the continuous improvement into 4 parts which can be identify/recognize the opportunity, plan the improvement accordingly, performing/executing the improvement and finally reviewing the final product. This process moves in a cycle and is executed until the task is achieved.

- **Identify:** First identify the problems and process that needs improvement in compliance with client requirements.
- **Plan:** Establish objectives and processes required to get the desired results by setting targets.
- **Execute:** Implementing the action plan keeping all the constraints in mind which gives us improved quality of the work done.
- **Review:** Evaluate how the improvement made resulted in quality of the work. Make changes in the current process if needed.

## 5 Communication Management Plan

### 5.1 Introduction

A communication management plan identifies how the stakeholders across the project would communicate. It further defines who will be receiving a particular communication, how would those people or stakeholders receive it, when they'll receive it, and further, how often would the communication flow. The plan also lays out a documentation framework in order to maintain a work record for any future addressing. This communication plan identifies project team members and the client, Professor Peter Carr as stakeholders/sponsor/professor.

With the onset of the Covid-19 pandemic, the communication plan has taken up appropriate measures for safety and the team has opted for online meetings and chatting tools, as the only mode of communication.

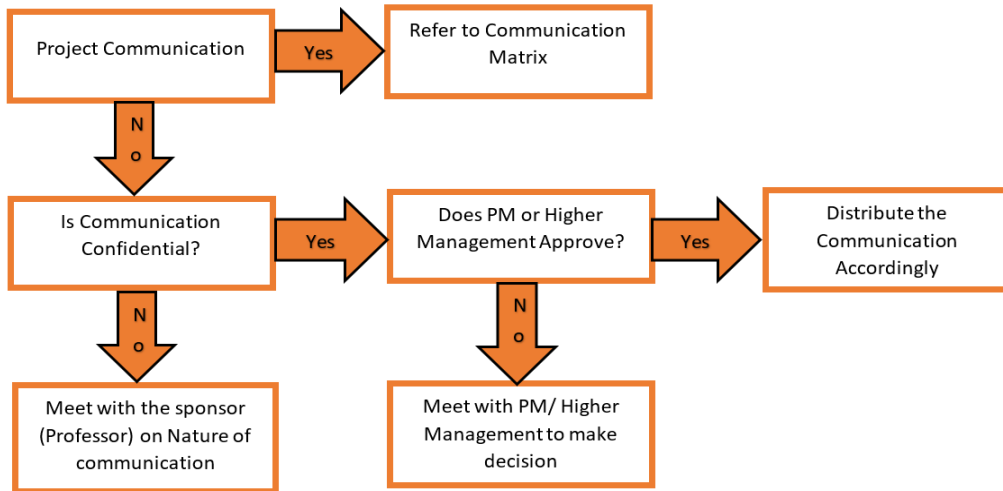
## 5.2 Communication Plan

The communication plan identifies the set number of meetings with their corresponding objectives, along with the required presence of stakeholders. The plan further would define the frequency of each meeting setup.

	<b>Purpose</b>	<b>Medium</b>	<b>Frequency</b>	<b>Audience</b>
Sprint Kick-off Meeting	Introduce sprint objectives, goals and deliverables.	Virtual Meetings (Zoom Meeting)	Once a week (Spring start)	Team Members
Stand-up meeting	Discuss any impediment faced by any team member	Virtual Meetings (Zoom Meeting)	Twice a week	Team Members
Sprint Review Meeting	Review the work done in the sprint by team members	Virtual Meetings (Zoom Meeting)	Once a week (Sprint end)	Team Members
Introspection Session Meeting	Introspect work done in last sprints and contemplate areas to improve.	Virtual Meetings (Zoom Meeting)	Once in two weeks	Team Members

### 5.3 Communication Flow Chart

A communication flow chart has been created for the team to follow. The chart provides a basic framework of communication for the project stakeholders, for improving the efficiency of the project.



### 5.4 Mode of Communication channels

Sl.No	Name	Role	Email Id
1	Naga Gangadhar Javeri Potiwal	Project Manager	<a href="mailto:ngjaveri@uwaterloo.ca">ngjaveri@uwaterloo.ca</a>
2	Satirpleen Kaur	Communication Manager	<a href="mailto:s98kaur@uwaterloo.ca">s98kaur@uwaterloo.ca</a>
3	Anmol Jawa	Communication Lead	<a href="mailto:a2jawa@uwaterloo.ca">a2jawa@uwaterloo.ca</a>
4	Jaskiran Kaur Saini	Quality Manager	<a href="mailto:jk3saini@uwaterloo.ca">jk3saini@uwaterloo.ca</a>
5	Mamata	Quality Lead	<a href="mailto:mmamta@uwaterloo.ca">mmamta@uwaterloo.ca</a>
6	Manideep Jakki	Research & Development Manager	<a href="mailto:mjakki@uwaterloo.ca">mjakki@uwaterloo.ca</a>
7	Yochitha Bathina	Research & Development Lead	<a href="mailto:ybathina@uwaterloo.ca">ybathina@uwaterloo.ca</a>
8	Prashanth Mahavadi	Risk Manager	<a href="mailto:pmahavadi@uwaterloo.ca">pmahavadi@uwaterloo.ca</a>
9	Mani Deepak Reddy Arumulla	Change Manger	<a href="mailto:mdrarumulla@uwaterloo.ca">mdrarumulla@uwaterloo.ca</a>

## 6 Change management

### 6.1 Scope

Any Project during the project cycle may have to see changes consistently. To counter these changes to our TWS Grade 3 English and Mathematics project we hereby propose a change request plan. However, the main aim is to regularize the dynamics of the project without compromising on quality and strive for meeting the project deadlines as stipulated.

Mainly change management plan shall register the necessary changes to the project and tracks the impacts of such changes for effectively managing the project changes from project start to finish.

Change management plan shall be planned in advance forecasting the changes that would happen during the project cycle. The main audience of the project would not only cover project manager and project team but also the project sponsor and other stake holders.

The change management process includes validation of the changes requested, tracking the submission, coordination, categorization and approval of release of project changes.

### 6.2 Change Management protocols

Change request Process			
SI no	Steps	Responsibility	Remarks
1	To fill the change request form	Any team member who wants a change in their plan	The team member/stake holder shall fill the change request form and submit to change manager
2	Registering the change request	Change manager is responsible to register the change request submitted by team member or a stake holder	Change Manager shall record the change request and issue a unique code to the change request proposal
3	Validate the change request	Change request manager is responsible to inform all the team members regarding the change request proposal	Change request manager shall call for a meeting with all the team members or stake holders and discuss on the impacts of the change proposal. Here all the team members and stake holders are expected to promptly attend the meeting or send their comments on the proposal

4	Follow up	Change request manager is responsible to follow up with all the team members and stake holders for their comments on the proposal	All the comments received are consolidated and make necessary changes to the proposal and prepare a final proposal. For this a committee with experienced / subject matter experts may be formed if necessary.
5	Circulation of final draft	Change request manager is responsible for circulate the final draft to the team members and stake holders for receiving their final opinion on the final draft.	Here though opinions are taken from all the team members and stake holders, change management team strives for consensus else, majority opinion prevails.
6	Approval	Change request manager is authorised to approve the final draft	Change request manager shall request all the team members and stake holders to change their plans accordingly

Change request form			
			Change request no:
Project Name			
Department			
Change requester details			
Requester Name			
Change request Date			
Requester email			
Requester phone no			
Change request type	Critical	Important	Desired
Basic details of the change request			
Description of request			
Justification of request			
Annexures if any			

Change categories	
Critical	Change required to meet the regulatory needs like copy rights etc.
Important	Change which has a significant importance such that it may impact the schedule and delivery time
Desired	Changes that are proposed by R&D team like new initiatives etc. that would not affect the plan and schedule of project

Stake holders to decide on the status of the change request proposal

Role	Name	Contact details	Description
Executive Sponsor	Mr.Umair Khan	umair.khan@itacec.org	His opinion plays a crucial role in approving critical change requests
Professor	Peter Carr	pd carr@uwaterloo.ca	Communicates the change proposal to the sponsor
Project manager taking the confidence of other team members	Naga Gangadhar Javeri Potiwal	ngjaveri@uwaterloo.ca	His opinion plays a crucial role in approving important and desired change requests

## 7 Risk Management Plan

In General, if you observe any project irrespective of size and scope will meet certain challenges while the work is in progress. A risk is any uncertain condition that might affect your project. In my opinion not all risks are negative. Some of the situations/events (such as finding an easier way to do an activity) can help your project. When this happens, we call it an opportunity; but it's still handled just like a risk. There are no guarantees on any project. Even the simplest activity can turn into unexpected problems. Anything that might occur to change the outcome of a project activity, we call that a risk. A risk is something that may or may not happen. But if it does, then it will force you to change the way you and your team work on the project.

- The main motto of the risk management plan is to provide the project manager and the group that you are working with (team) and means to identify, control, and response to such risks.
- We identified certain risks to the efficient handling of our project. These are the risks those are in the process of being handled. As project is interesting and challenging, we are expecting the following risks and anticipate more risks to cross our path.
- As a team we are assigned to do Grade3 English and Mathematics project, the deadline finalized for the project might coincide with the other academic progresses as the members in the team are all full-time students. Because of assignments of other subjects, and exams in between the semesters might hinder the teamwork ability to deliver the content on the promised deadline of project/milestone.
- While the project is in progress there might be a chance to one of our team members to get sick, this will be going to affect the project plan and the work that is assigned to the member of team this may leads to change of project plan.
- Since we are dealing with project and deliverables will find users among the teachers in Pakistan, the compatibility and integrity of the information gathered to those of the clients is a risk factor. Since all the sources are gathered in English language, language barrier could be a risk that would prevent the full impact of our deliveries.
- While gathering resources for the SLO's (Student learning outcomes) , the need of videos that is related to the concepts and games that promote e-learning will be high. But the risk associated with this is also be very high. By collecting all these resources from copyrighted websites there might me chance of copyright infringement.
- The links that we are going to gather and compile for the clients in the final report has to have high accuracy and integrity, any inactive links/broken links and unauthorized sourced links will lead to wrong information.
- Any unforeseen situation of individual team members may affect the milestone achievements. This must be dealt with morally without impacting the team performance.

## **8 Research & Development Plan**

### **8.1 Definition**

Investigative activities that a business makes a deliberate decision to conduct. Intention is generally strategic (future growth) and aims is to make a discovery that can either lead to the development such as new products or procedures, or to improvement of existing products or procedures.

R&D is the purposeful and systematic use of scientific knowledge to improve man's lot even though some of its manifestations do not meet with universal approval." (Twiss, 1992)

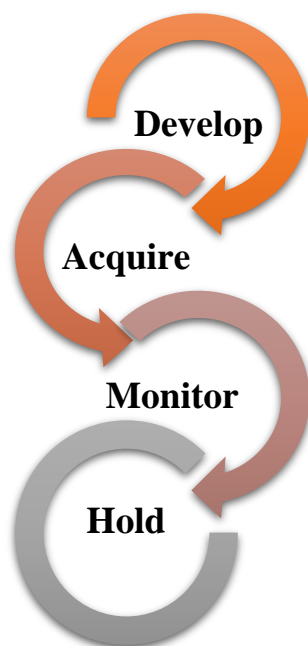
## 8.2 Importance

- Fast changing environment
- Continuous technology change
- Competition
- Changing consumer
- Efficient production processes

## 8.3 Scope

- As main objective of this project is to provide high-quality digital learning platform to teachers of grade 3 by providing learning resources as per Pakistan National Curriculum thus Research and Development strategy plan is useful to adapt new knowledge about an area.
- Responsible for research, planning, and implementing new programs and protocols into Grade 3 TWS English and Mathematics projects.
- Mainly focuses on performance improvements to existing solutions such as providing more related resources which are easy to digest and have broader way of information across all verticals.
- Provide necessary resources for operation and implementation of new initiatives.
- Observe and evaluate the impacts of new initiatives.
- Prepare a detailed report on performance of tasks, metrics and it is a better plan to review all the URL links and ensure not to have any performance issues

## 8.4 R&D Operational Activities



These are the technologies that it makes sense to pursue development with your own internal resources or other reference resources

When a technology is commercially available, and its acquisition makes more sense for project development.

Technologies that could provide benefit in the future, or whose development could be a threat belong in the 'Monitor' category.

Current development areas where investment should be stopped or showing no action needed/resources spent.



## 8.5 R&D Team Chatter for Progress Tracking:

R&D: DELIVERABLES CHARTER					
R&D Manager: Manideep		R&D Team Lead: Yochitha		Project Manager: Naga Gangadhar Javeri Potiwal	
DISTRIBUTED PHASE - TASK STATUSES					
Tasks& Status	In Progress	On Hold	NOT Started	Completed	Not Applicable

## 9 HUMAN RESOURCE MANAGEMENT PLAN

This group comprises of 9 members and each member has been associated with respective roles taking previous experiences and other certain criterions such as skills etc., Initially at first meeting, figured a way to map to the respective roles based on the criteria stated above and later the team members has obeyed to all this considerations.

### 9.1 Roles & Responsibilities

1. Project Manager
  - Keep the communication with clients as well as the project team members to monitor the progress of the project.
  - Focusing on resolving the issues and Activity planning.
  - Ensuring the satisfaction within the team and successfully deliverables to the client at the end of the project.
2. Communication Manager & Lead
  - Manage all internal communications within the team.
  - Coordinate amongst team members to facilities routine team meetings.
  - Responsible for follow ups on agreed actions.
3. Quality Manager & Lead
  - Ensure quality standards are set for information to be accurate and conveyed to team.
  - Monitoring the work by the end of each week and checking its alignment with the scheduled template.

- Assuring quality of the work by making required changes wherever the quality is not up to the mark.
4. Research & Development Manager & Lead
- Responsible for providing extra resources and supporting project as SME's.
  - Responsible for providing new strategic ideas which helps in improving Management overall progress.
  - Providing Feedback, Suggestions and sharing Best Practices for continuous performance and process Improvements.
5. Risk and Change Request Manager
- Documents and tracks the necessary information required to effectively manage TWS Grade 3 project changes from inception to delivery.
  - To establish an orderly and effective procedure for tracking the submission, coordination, review, evaluation, categorization and approval for release of all changes to project's baselines.
  - To provide project manager and other team members, tools and means to identify, assess, control and respond to risks and issues of the project.

## 9.2 Mapping Roles to team members

All the roles and respective responsibilities have been mapped accordingly. Below table and figure illustrates the profiles of each individual along with there previous experiences.

Name	Role	Previous Experience
Naga Gangadhar Javeri Potiwal	Project Manager	Started a start-up named "VoxBox" in collaboration with Indian School of Business (as a part of Technology Entrepreneurship Program)
Satripleen Kaur	Communication Manager	Design Engineer at Siemens Limited India
Anmol Jawa	Communication Lead	Software Developer at Publicis Sapient
Jaskiran Kaur Saini	Quality Manager	Marketing Manager at Fedora Solutions
Mamata	Quality Lead	Software Engineer at Ingenico Corp
Manideep Jakki	Research & Development Manager	Software Engineer at Accenture
Yochitha Bathina	Research & Development Lead	Business Analyst at TCS
Prashanth Mahavadi	Change request Manager	Deputy Manager – Maintenance and Senior Engineer - Project execution at KSK Energy Ventures limited
Mani Deepak Reddy Arumulla	Risk Assessment Manager	Software Engineer at Infosys

## Group – 3 Mathematics and English for Grade 3 Team Hierarchy

