

Annual Core Theme Mission Fulfilment Evaluation and Planning

Work Book

Core Theme	Research
Submitted by	Research Committee of Senate
Chair	Mohamed Tawhid
Date	August 20, 2020

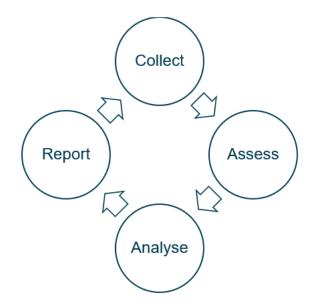
Table of Contents

Overview	3
Timeline for Submissions	3
Collect	4
Mission Fulfilment Framework for Core Theme	4
Assess	6
Review of Previous Year	6
Analyse	7
Review of Objectives, Outcomes, and Indicators	8
New Indicators and Emerging Indicators	9
Levels of Achievement	11
Discussion	12
Thank you!	12

Overview

Annual review of the core themes in relation to Mission Fulfilment involves four steps:

- 1. **Collect** data for each of the indicators.
- Assess the level of achievement for each indicator.
- Analyse results, considering contextual factors, and discuss implications relating to the success of the core theme.
- 4. **Report** results to TRU's governing bodies to inform divisional and unit planning across the institution.



Completed workbooks are submitted to the Accreditation Liaison Officer (ALO) annually on June 30. ALO compiles findings into an Annual Institutional Mission Fulfilment Report that details how successful TRU was in fulfilling its mission that year.

Timeline for Submissions

April 1 - June 30	Standing Committees of Senate conduct annual assessment of Mission Fulfilment.
June 30	Core Theme Work Book submitted to ALO at ahoare@tru.ca
July 1 - July 31	ALO compiles Core Theme Work Books into an Annual Institutional Mission Fulfilment Report.
August 1 – 31	Accreditation Steering Committee (ASC) reviews Annual Institutional Mission Fulfilment Report
September 1 – September 30	Broad distribution of Annual Institutional Mission Fulfilment Report through TRU's collegial governance process.
	The report is brought forward by the Provost and Vice President Academic and Research to APPC, Senate, PCOL, and the Board of Governors. The report is then posted publicly to the TRU website.

Collect

Complete the following Mission Fulfilment Framework for your Core Theme by inserting the values for the current reporting cycle, including any new or emerging indicators (if applicable) that were identified in last year's workbook.

Mission Fulfilment Framework for Core Theme

Objective	Outcome Indicator		MF	Threshold Range	es	Five Year	Values
			Achieved	Minimally Achieved	Not Achieved	Goal	
1.0 TRU will create a sustainable research	1.0 TRU faculty are competitive for external funding	1.1 Percentage of active tri-partite faculty holding external funding (contract and grant)	3% or > increase	-1 to 3% change	-1% or > decrease	40%	2017: 24% 2018: 28% 2019: 34% 2020: 33%
culture		Total dollar amount of tri-agency grants and external contracts (3-year rolling average)	\$600,000 or > increase	\$0 to \$600,000 increase	Decrease	\$4.5M (3-year rolling average)	2017: \$2.3M (\$1.7M) 2018: \$4.3M (\$2.8M) 2019: \$3.3M (\$3.3M) 2020: \$4.3M (\$3.9M)
	2.0 TRU faculty create new knowledge	2.1 Number of peer-reviewed publications, scholarly works, exhibitions and other creative works per faculty member as a percentage of total tri-partite faculty (3-year rolling average)	3% or > increase	-1 to 3% change	-1% or > decrease	Undefined	2018: 320 2020: N/A
	3.0 TRU faculty and students disseminate new knowledge impactful to the communities we serve	3.1 Number of Community Citations Score, as measured by the total references in external media, annual reports, policy documents, newsletters and number of community held forums reporting research results and activities to participants, stakeholders and knowledge users by TRU faculty and community groups	3% or > increase	-1 to 3% change	-1% or > decrease	Undefined	No data to date.
		3.2 Number of undergraduate student knowledge mobilization activities facilitated by the office of Research and Graduate Studies	Undefined	Undefined	Undefined	Undefined	New indicator 2019: 155 ¹ 2020- 237
	4.0 Undergraduate student engagement in research activities	4.1 Percentage of TRU courses that include Research informed Learning (RiL)	Undefined	Undefined	Undefined	Undefined	Emerging indicator and outcome No data to date ² .

¹ 32 papers by TRU students presented at PHP conference; 80 presentations, posters, and exhibitions at the UG Conference; 4 papers by TRU students published in PHP's Dialogues; 16 Knowledge Makers published; 7 students published in the UG Conference Proceedings; 16 students featured in TRU research stories and media initiated by the research office

² Data collection in progress Currently information collected from Nursing, Tourism and some SOBE faculty.

Objective	Outcome	Indicator	MF	Threshold Range	es	Five Year	Values
			Achieved	Minimally Achieved	Not Achieved	Goal	
		4.2 Number of users across Canada accessing the National Clearinghouse for Research and Resources on Undergraduate Research Training and RiL	Undefined	Undefined	Undefined	Undefined	Emerging indicator No data to date ³
		4.3 (a) GPA of first and second year students engaged in the Research Coach program; (b) Retention rates of first and second year students engaged in the Research Coach program; (c) Number of students participating in the Research Coach program; (d) Number of students interacting with faculty while doing a research project.	Undefined	Undefined	Undefined	Undefined	Emerging indicator No data to date ⁴
	5.0 TRU facilitates the creation, co-creation and translation of knowledge, resulting in new discoveries, products, processes and practices that will mutually benefit TRU and communities to lead positive environmental, cultural, social and economic change.	 5.1 Cultural Maps of the knowledge building pathways including partnerships and learning outcomes which demonstrate: 1. Promoting technological and social innovation and social enterprise 2. Germinating ideas and applied research opportunities 3. Developing research relationships/partnerships with community partners 4. Sharing research infrastructure and engagement spaces 5. Enabling knowledge exchange 6. Celebrating shared successes 	Undefined	Undefined	Undefined	Undefined	Emerging indicator and outcome No data to date ⁵

³ Data collection in progress. Website is still in development and is expected to be ready January 2020.

⁴ Data collection in progress The Research Coach program requires at least three years of data to begin to assess the indicators identified. At this time we can share three students from this program in the winter applied for a UREAP. We will continue to collect the data and report on it as it grows.

⁵ Cultural/Social Impact Maps (under development by Office of Research and Graduate Studies).

Assess

Review of Previous Year

Complete the following for each indicator:

Current Value, Mission Fulfilment Range, and Contextual Factors

- 1. Gather information, in collaboration with ALO, Integrated Planning & Effectiveness (IPE), and relevant departments, to determine the indicator value for the most recent period.
- 2. Determine the change from the prior year and identify which of the mission fulfilment ranges applies (i.e., *Achieved / Minimally Achieved / Not Achieved*).
- 3. Describe factors (e.g., plans, services, environmental, or initiatives) that impacted the progress of the indicator.

Table 1: Identification of Mission Fulfilment Range

Indicator # and descriptor	Prior Year Value	Current Value	Mission Fulfilment Range	Factors positively or negatively affecting progress
1.1 Percentage of active tri-partite faculty holding external funding (contract and grant)	34%	33%	Minimally Achieved	This is an important indicator of faculty participation in research initiatives and underscores the quality of TRU's research. However, it is a challenging indicator to track as the inputs are not linear: the number of tri-partite faculty members changes annually and grants/contracts come to completion.
1.2 Total dollar amount of tri-agency grants and external contracts (3-year rolling average)	\$3.3M	\$3.9M	Achieved	While there are annual differences, the total dollar amount of Tri-Agency grants and external contracts continues to grow at a consistent rate, as a 3-year rolling average. Ongoing success with infrastructure grants from CFI has been an important part of the growth.
2.1 Number of peer-reviewed publications, scholarly works, exhibitions and other creative works per faculty member as a percentage of total tri-partite faculty (3-year rolling average)	320	N/A	N/A	This information is collected by TRU as part of the Academic Professional Activity Report (APAR), but is not made available to inform this process.
3.1 Number of Community Citations Score, as measured by the total references in external media, annual reports, policy documents, newsletters and number of community held forums reporting research results and activities to participants, stakeholders and knowledge users by TRU faculty and community groups	No data to date.	N/A	N/A	Tracking the number of community citations has proven quite challenging. Instead, this indicator will be replaced with a new indicator 5.1 Cultural Mapping (see Table 5 for more details) in 2021.
3.2 Number of undergraduate student knowledge mobilization activities funded by the office of Research and Graduate Studies	155	237	Achieved	Due to the research coach program offered in the fall, numbers increased; however, numbers then decreased due to the F2F cancellation of the undergraduate research conference, which was on track to be the largest group of participants this year.

Analyse

Identify how successful TRU was in fulfilling its mission for the core theme in light of the values of the indicators and the definition of Mission Fulfilment, as well as, strengths and opportunities for improvement.

Definition of Mission Fulfilment

Mission Fulfillment occurs when 70% of the indicators for each of the four Core Themes are in the *Achieved* or *Minimally Achieved* threshold ranges.

Note: TRU acknowledges that not all indicators carry the same weight in terms of their impact on outcomes. The impact of indicators may become evident through this analysis, and may inform future decision-making, including the relevance of tracking certain indicators.

Table 2: Summary of Core Theme

How successful was TRU in achieving mission fulfilment for this core theme?

Of the five indicators articulated for core theme Research, data was available for three. Of those three, TRU is *minimally achieving* and *achieving* mission fulfilment. Therefore, Research was 100% successful in achieving mission fulfilment in 2020.

Identify strengths and successes

TRU continues to successfully build a sustainable research culture and is now averaging nearly an ongoing 20% annual increase in the value of externally sponsored research with a 3-year rolling average of almost \$4M. A high faculty success rate securing federal grants increases TRU's allocation of Canada Research Chairs (6 totaling \$650K annually), Canada Foundation for Innovation, and the Research Support Fund (\$600K annually to support indirect costs).

These collective successes result in direct benefits for students, including \$800K in research assistantships, research fellowships, increased federal scholarship allocations (eg. Undergraduate Student Research Awards and Canada Graduate Scholarships), and greater access to world-class research equipment and laboratories. This is further fortified by TRU's internal undergraduate research investments of nearly \$450K in programming to build incremental capacity and leadership.

One third of research-focused faculty hold external funding to support of their work, contributing to TRU's reputation as an emergent research institution and creating new pathways for enhanced partnership development and community collaboration. The Interior Universities Research Coalition (UNBC, UBC-O), the Interior Academic Health Science Consortium (Interior Health, UBC-O, BC Cancer Agency), the Province of BC, and the xChange Lab (Memoranda of Understanding with the City of Kamloops and the United Way) all stand as examples of these developing and novel partnerships. Organizational partnerships have been an important lever to secure additional resources such as a new, endowed research Chair from the Province of BC.

List opportunities and areas in need of improvement

Access to TRU faculty scholarly output data would allow for a comprehensive assessment of the academic and community impacts of our research and identify creative forms of knowledge mobilization.

Review of Objectives, Outcomes, and Indicators

Objectives and Outcomes

Review current objectives and outcomes to confirm alignment with core theme and TRU's mission statement. If necessary, add or remove objectives and/or outcomes to keep the core theme relevant to TRU's mission statement.

Table 3: Review of Objectives and Outcomes

Objective and Outcomes	Still relevant (Y/N)	If not, identify revisions and provide rationale for change
Objective 1.0 TRU will create a		
sustainable research culture		
Outcome 1.0 TRU faculty are competitive	Y	
for external funding		
Outcome 2.0 TRU faculty create new knowledge	Υ	
		This automorphism has been also the standard for the stan
Outcome 3.0 TRU faculty and students		This outcome has been challenging to measure without access to data.
disseminate new knowledge impactful to the communities we serve		uala.
NEW Outcome 4.0 Undergraduate student		
engagement in research activities		
NEW Outcome 5.0 TRU facilitates the		
creation, co-creation and translation of		
knowledge, resulting in new discoveries,		
products, processes and practices that will		
mutually benefit TRU and communities to		
lead positive environmental, cultural, social		
and economic change.		

Indicators

Review the current indicators and rationales to confirm alignment with TRU's mission, the core theme, objectives, and outcomes. Determine if indicators need to be removed, revised, and/or if new indicators are required to track if the outcomes associated with the objectives are being achieved.

Table 4: Review of Indicators

Indicator #	Still relevant (Y/N)	If not, provide rationale
1.1 Percentage of active tri-partite faculty holding external funding (contract and grant)	Y	
1.2 Total dollar amount of tri-agency grants and external contracts (3-year rolling average)	Y	TRU will set new targets for this indicator as the projected \$4.5M annual average will be met in 2021.
2.1 Number of peer-reviewed publications, scholarly works, exhibitions and other creative works per faculty member as a percentage of total tri-partite faculty (3-year rolling average)	Y	
as measured by the total references in external media, annual reports, policy documents, newsletters and number of community held forums reporting research results and activities to participants, stakeholders and knowledge users by TRU faculty and community groups	Z	Tracking the number of community citations has proven quite challenging. Instead, this indicator will be replaced with a new indicator 5.1 Cultural Mapping (see Table 5 for more details) in 2021
NEW 3.2 Number of undergraduate student knowledge mobilization activities funded by the office of Research and Graduate Studies	Y	Slight modification to the indicator to bring it into the scope of the Office of Research and Graduate Studies.

New Indicators and Emerging Indicators

New Indicators

Refer to indicators for which TRU has three years of historical data and be added or replace a current indicator.

Emerging Indicators

Given the changing nature of the institution, initiatives, and available data, consider if there are other indicators that would better measure the core theme objectives. Emerging indicators may be beneficial for tracking in the future, however, historical data does not currently exist. Ideally, three years of historical values should be available in order to make informed plans. It is beneficial to start to track the indicator value before it is used as an indicator for the core theme, as this will help develop historical information.

Finally, consider if a qualitative performance indicator would be beneficial. "Although quantitative indicators show trends and uncover interesting questions, they cannot by themselves provide explanations or permit conclusions to be drawn. Additional research will always be required to diagnose the causes of problems and suggest solutions" (Canadian Education Statistics Council, 2006, p.x).

Table 5: New and/or Emerging Indicators

Indicator	Rationale and Data Source	MF	Threshold Rai	nge	Five Year Goal	Historical	New or
		Achieved	Minimally	Not Achieved		Values	Emerging
			Achieved		000/ 5 11/5	.	N. 0004
4.1 Percentage of undergraduate	List of approved Critical Thinking & Investigation				80% of all first-year students	N/A	New 2021
baccalaureate degree students who complete courses with RiL outcomes with	courses as part of TRU's general education				enrolling in baccalaureate		
a minimum of C grade or better.	model (beginning Fall 2021)				programs in the fall of 2021		
	Note: First year F21 students should graduate						
	with a RiL course at the end of their degree (4-						
	year program) in 2025. We may need to monitor						
	baccalaureate completion rates as students may						
	not complete programs in 4 years and this could						
	effect the outcome of this indicator.						
4.2 Number of users across Canada	Development of the National Clearinghouse for				As an open education resource,	N/A	Emerging
accessing the National Clearinghouse for Research and Resources on	Research and Resources on Undergraduate				the goal would be to track this		
	Research Training and RiL is still in progress as we work in partnership with Open Learning and				from year 1 – locally to year 2- regionally and build into		
Undergraduate Research Training and Ril	students as co-creators. The goal is to launch				international access by year 5.		
INL	the site in September 2020 and will be able to				International access by year 5.		
	report users in the Spring of 2021.						
4.3 Percentage of students participating in	To address access to undergraduate research				In order to identify a five-year	N/A	Emerging
undergraduate research programs that	through an EDI lens (currently reviewing UR				goal it will be important to		
identify as but no limited to women,	programs and developing a framework to				establish baseline data for year 1		
Indigenous peoples, persons with	capture EDI through student undergraduate				while working with institutional		
disabilities, members of visible	research programs). New indicator to report				EDI committee(s). The baseline		
minority/racialized groups, and members	Spring 2021.				will then help to set targets for		
of LGBTQ2+ communities.					years 2 – 5.		

Indicator	Rationale and Data Source	IV	IF Threshold Ra	nge	Five Year Goal	Historical	New or
		Achieved	Minimally Achieved	Not Achieved		Values	Emerging
 5.1 Cultural Maps of the knowledge building pathways including partnerships and learning outcomes which demonstrate: a. Promoting technological and social innovation and social enterprise b. Germinating ideas and applied research opportunities c. Developing research relationships/partnerships with community partners d. Sharing research infrastructure and engagement spaces e. Enabling knowledge exchange f. Celebrating shared successes 	TRU was unable to complete the gathering of data for the cultural maps. When face-to-face contact feasible we will move forward with gathering this information; however, at this time due to the impact of COVID and lay-offs there are limited resources in the office and this indicator is contingent on having the appropriate support to complete.	Positive contribution to community	Positive contribution to community	No or Negative contribution to community	Lead in community research and scholarship. We will support all faculty members in knowledge-seeking, knowledge creation, and creative inquiry. We will earn recognition as the most committed and innovative university in Canada for research and scholarship based on community partnerships; for involving graduate students in community-centred research; and for undergraduate research training.	N/A	Emerging

Levels of Achievement

In your review of the annual mission fulfilment threshold ranges, consider what is acceptable (or not) on an **annual** basis. For example, ask yourselves:

Achieved

What does achievement look like? For example:

- an increase in retention rate of 2%; or, perhaps, 5%
- an increase in Indigenous students' sense of belonging, as evidenced by a sampling of Indigenous students' narratives

Minimally Achieved

What would be considered maintaining the status quo? For example:

- a 0% increase in intercultural activities delivered; or, perhaps, a range of -1 to +1%
- little change in students' ability to navigate university processes (e.g., admissions, advising, degree progression, etc.), as evidenced by a representative sample of students' journey maps.

Not Achieved

What would be considered problematic? For example,

- a decrease in tri-agency research dollars awarded by 2%; or, perhaps, 5%
- a decrease in the level of satisfaction with student support services, as evidenced by qualitative student responses to the NSSE survey.

Review the existing threshold ranges and determine if any changes need to be made. If so, provide a rationale.

Table 6: Indicator Threshold Ranges

Indic ator		Threshold Ranges	Rationale for Change (if applicable)	
#	Achieved	Minimally Achieved	Not Achieved	
1.1	3% or > increase	-1 to 3% change	-1% or > decrease	
1.2	\$600,000 or > increase	\$0 to \$600,000 increase	Decrease	
2.1	3% or > increase	-1 to 3% change	-1% or > decrease	
3.1	3% or > increase	-1 to 3% change	-1% or > decrease	
3.2	Undefined	Undefined	Undefined	

Review the Five-Year Target (2018-2023)

Note: The current 5-year reporting cycle is 2018 – 2023. Unless exceptional circumstances require earlier review, leave this section blank.

Five-year targets should be aspirational yet realistic. They should provide a concrete goal and motivation to improve services, programs, or experiences as a means to achieve outcome targets. These targets can be tied to goals related to institutional strategic plans where available.

Table 7: Five-Year Targets

Indicator #	5-Year Target	Relevant (Y/N)	If not, provide revised target and include rationale for change
1.1	40%	Υ	
1.2	\$4.5M	Y	
	(3-year rolling average)		
2.1	Undefined	Υ	
3.1	Undefined	N	This will be replaced with new indicator 5.1
3.2	10% growth (260)	Υ	

Discussion

Finally, based on the analysis of the data available, identify risks and opportunities associated with the performance of the indicators. Comment on, for instance:

- themes or patterns in the data;
- implications of these findings;
- highlights and strengths;
- recommendations (if any); and/or
- outliers or unusual findings.

The data provided demonstrates ongoing increases in the percentage of active tri-partite faculty holding external funding; an increase in tri-agency grants and external contracts; and an increase in undergraduate student engagement knowledge mobilization activities. The opportunities that the core theme workbook may present moving forward would be to begin providing a more complete picture of TRU's research enterprise, which includes funded chairs, endowment chairs, research scholarships and awards, and a more robust picture of TRU's research infrastructure. We are not yet collecting the kind of data that would provide this picture, but we hope to add this into the core theme workbook moving forward.

There continues to be limitations on accessing data on the number of faculty and area publications. Furthermore, although such interests may range beyond the workbook, the impact of the research enterprise on the institution needs to be better quantified and documented: here we are thinking of ways to assess or take into account the impact of faculty engagement, the training of students as a high impact practice, the integration of research into the curriculum, and the impacts that flow from community engaged research and other regional initiatives that include the IURC, the health research clusters, funded post-doctoral student training, research training facilities, research lab and student training infrastructure, research funded partnerships and relationships with provincial and federal funders, events and symposia.

Thank you!

Determining indicators and reporting on Mission Fulfilment is an important task. Your work keeps the University focused on its mission.

To send feedback on the process, please contact TRU's Accreditation Liaison Officer, Alana Hoare at ahoare@tru.ca.