

Planning and Pursuing an Illuminated Path: Applying Frameworks and Tools to Produce Evidence that Matters

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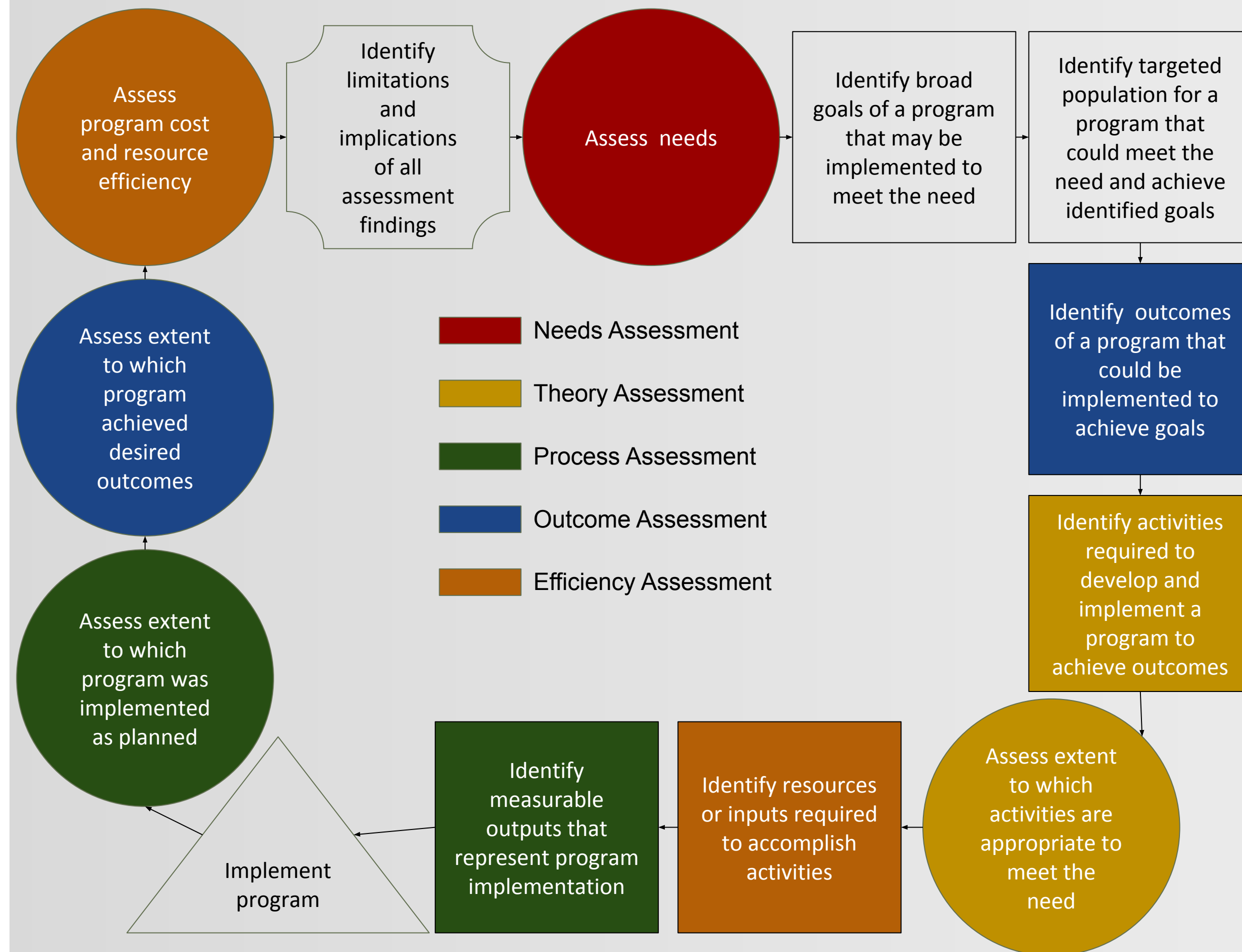
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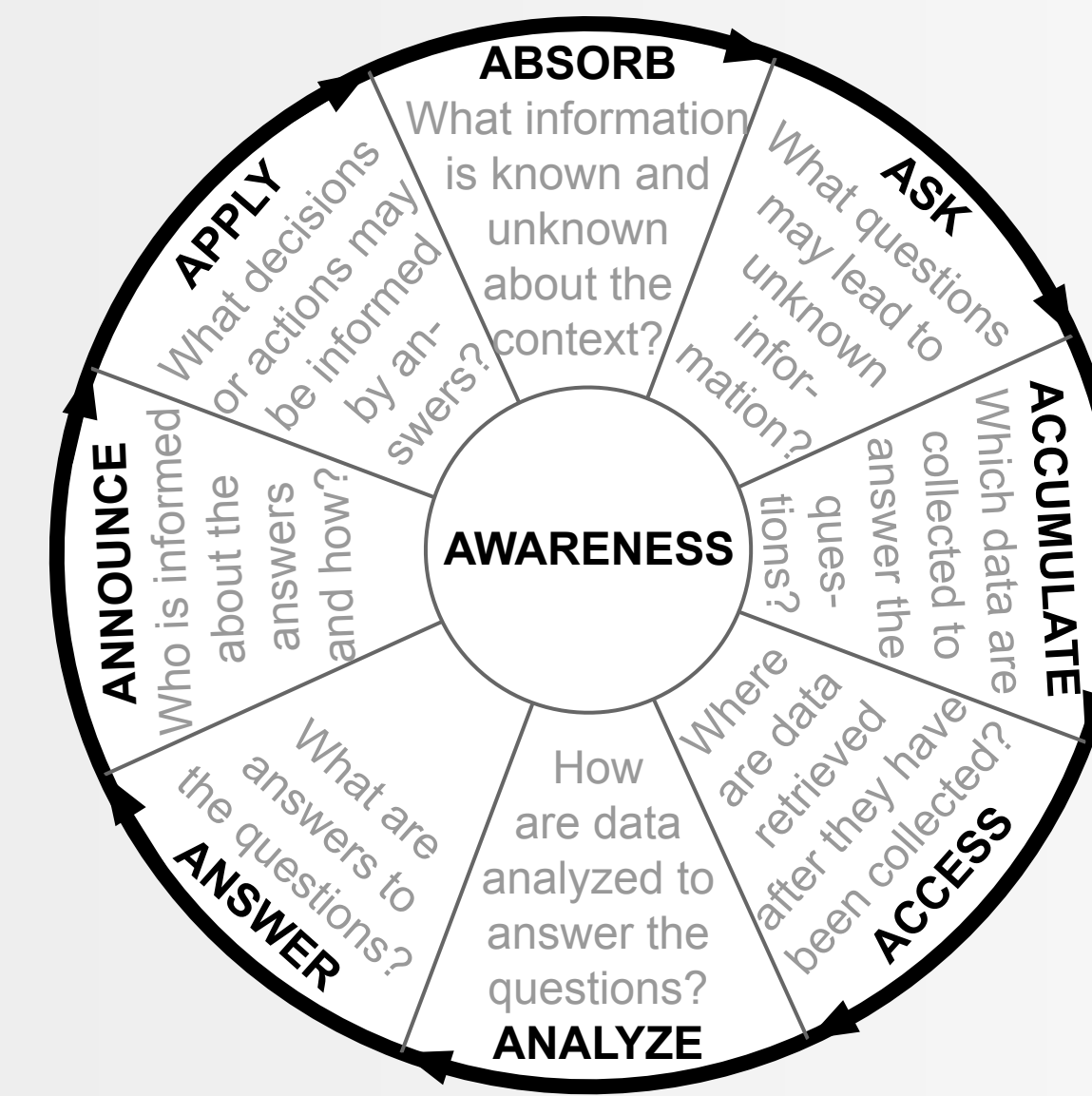
Assessing needs, theory, processes, and outcomes of the *Develop Your Data Mindset: Essentials of Educational Data Use* online curriculum for educators

Frameworks and Tools

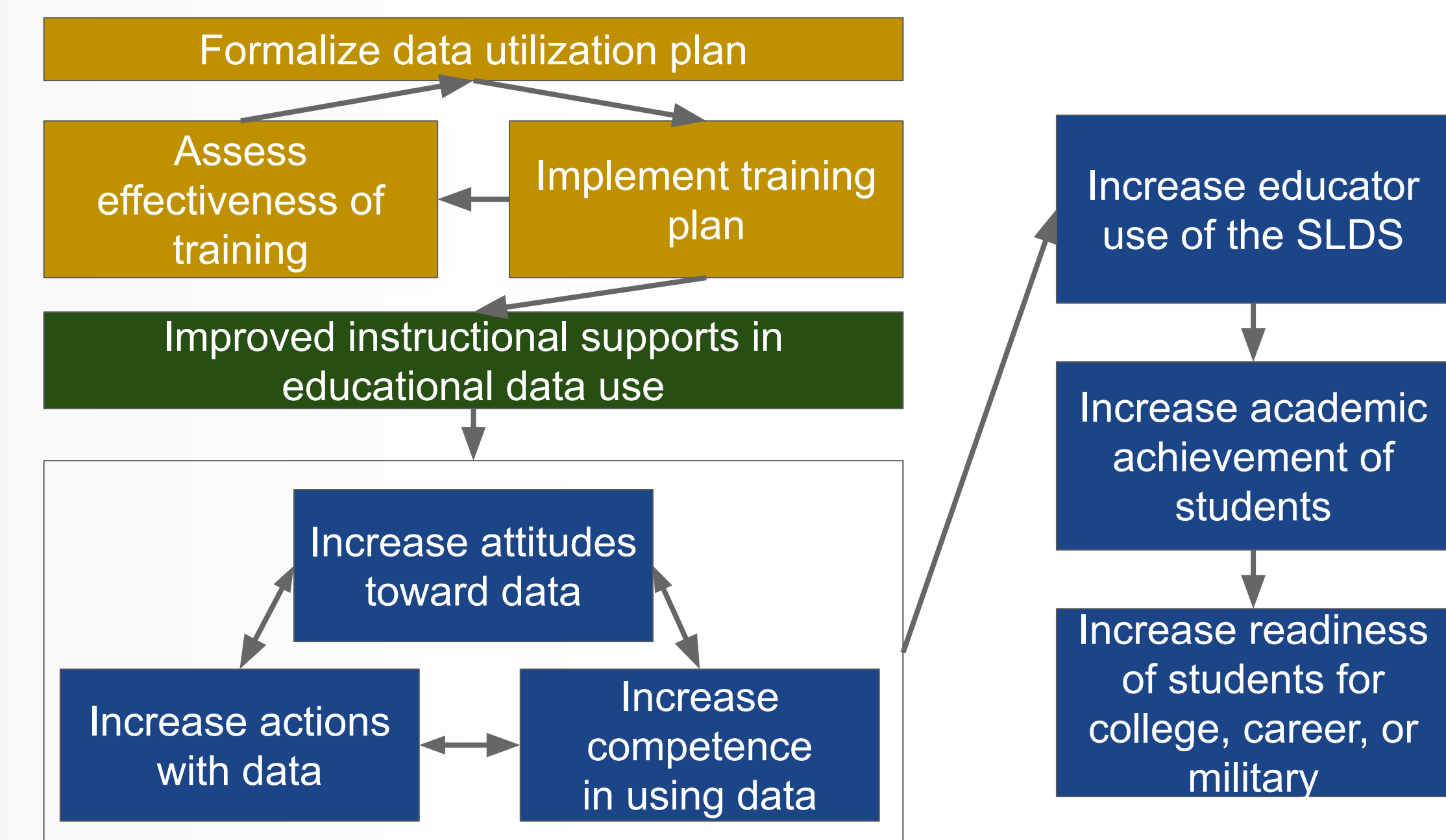
Program Evaluation Framework (theoretical lens to guide program development and assessment)



A+ Inquiry (model to operationalize outputs & outcomes)



Theory of Change (basic visual representation of how change is expected to occur)



Metrics Spreadsheet (compile measurable output and outcome values) e.g.,

Logic model	Category	Metric/indicator description	Value
Output	Completed curriculum aligned with literature	# modules	13
Outcome	Increase competence in using data	Change in pre- to post-score on Teacher Data Use Survey competence scale	.27

Project Plan (monitor implementation of tasks aligned with activities) e.g.,

Code	Project and Task Name	Status	Start date	End date
1.1.2.4	Develop data utilization course	Operational	10/1/15	10/31/17
1.1.4.9.2	Analyze curriculum eval data	Operational	11/1/18	9/30/20

Logic Model (one-page snapshot of a program)

Need / Context: There is a need for instructional supports to increase in-service and pre-service teachers' effective utilization of North Dakota Statewide Longitudinal Data System (SLDS) data toward improving PK-12 student achievement						
Project Title		Expected Goal		Target Population		
Develop Your Data Mindset: Essentials of Educational Data Use online curriculum		Increase data use competence, actions, and attitudes of k12 educators		North Dakota pre-service and in-service teachers		
Resources / Inputs	Activities	Outputs	Short-Term Outcomes	Mid-Term Outcomes	Long-Term Outcomes	
SLDS FY15 Grant SLDS staff ND Center for Distance Education Google Drive Articulate Storyline Agilix Buzz ND Data Steward ND Educational Data Alliance ND Association of Colleges for Teacher Education Anderson Inquiry EDOVATIONS Xperience Education ND Information Technology Dept. ND Department of Public Instruction ND Educational Technology Council ND Regional Education Associations	1.1.2 Formalize data utilization plan	Needs assessment conducted	Increase competence in using data	Increase educator use of SLDS	Increase readiness of students for college, career, or military	
		Meetings w/ Curriculum Advisory Committee				
		Completed curriculum aligned with relevant literature				
		Curriculum in e-learning format				
	1.1.3 Implement data utilization training plan	Continuing ed credit & data use certificate available	Increase actions with data	Increase academic achievement of students		
		Modules piloted and revisions made				
		Online curriculum promoted				
		Pre- & in-service enroll in & complete modules				
	1.1.4 Assess effectiveness of data utilization training	Continuing ed credit (CEC) & data certificate earned	Increase attitudes toward data			
		Learning Record Store (LRS) and reports for collecting and analyzing xAPI data				
		Eval publications and presentations				

Evidence Examples

Categories of Assessment (w/ indicators)	Assessment Question	Evidence
Needs Assessment	(To what extent was there a need for instructional supports to increase effective data use?)	Professional standards relevant to data use; training opportunities relevant to data use; studies revealing need to improve data use
Theory Assessment	(To what extent were activities of developing/disseminating curriculum appropriate to meet the need?)	Alignment with education initiatives, SLDS data utilization standards, data utilization framework, and best practices in e-learning
Process Assessment	(To what extent were curriculum development and dissemination activities implemented as planned?)	1.1.2 Formalize data utilization plan 5 themes revealing need; 7 professional organizations w/ data standards; 3 school improvement initiatives; 21 CAC members; 40 references aligned w/ course; 13 modules; 90 course resources; 39 data use standards aligned with content; 1 LMS w/ modules; 1 CEC available 1.1.3 Implement data utilization training plan 227 enrollments; between 41-173 completers by module; 1.1.4 Assess effectiveness of data utilization training plan 1 LRS; 5 xAPI reports; 1 publication
Outcome Assessment	(To what extent did the curriculum achieve desired outcomes?)	Short-term • Increase competence in using data between 7.1-15.3 percentage point increase in mastery based items answered correctly from 1st to 2nd attempt in modules 5-13; .27 increase in score from pre to post on TDUS competence • Increase actions with data .46 increase in score from pre to post on on TDUS actions • Increase attitudes toward data .06 decrease from pre to post on TDUS attitudes Mid-term (indicators defined, not yet assessed) Long-term (indicators defined, not yet assessed)
Efficiency Assessment	(To what extent was the curriculum implemented with efficient utilization of resources?)	Indicators not yet defined