The instrument used to collect data from the variable (X) STEAM is as follows:

 Table 1. STEAM Instrument

No.	Aspect	Indicator	Favourite	Unfavourable
1.	Science	The scientific aspect of STEAM-charged learning allows children to find something, observe, identify, the changes that occur and how they participate and contribute in activities to protect the surrounding environment.	allows children to make observations, thinking, and linking between concepts or what happened to the child.	media that does not allow children to make observations, thinking, and linking between concepts
2.	Technology	The technology aspect of STEAM-charged learning encourages children to have the ability to use and develop it based on their own needs, interests and ideas through the tools and materials that have been prepared.	can encourage children to choose the tools used to complete the work. Example: small shovel, cotton, water, soil glass bottle	media that cannot encourage
3.	Engineering	The engineering aspect of learning with STEAM makes it easier for children to compose or assemble into a shape or other form.	makes it easier for children to use tools or objects to assemble something.	
4.	Art	The art aspect of STEAM-charged learning allows children to create freedom in exploring and experimenting to produce a work.	allows children to create something interesting so that it can provide fun.	
5.	Math	The mathematical aspect of STEAM-charged learning introduces mathematical		

concepts through play activities such	asmathematical	concepts	through	n play	children	to u	ınderstand
recognizing quantities (how many or h	now activities such	as recogn	izing n	umbers,			
many) structures (shapes) space (an	shapes, and par	terns.			play activities	such as re	cognizing
and distances), patterns, numbers, and	solexample, com	iting green	bean sec	eus mai	numbers, shap	es, and pat	terns.
on.	are planted, t	ounting sec	eus mai	t grow,			
	measuring th						
	mentioning the	shape of se	eds and	leaves			

(Force, ST, 2014)

The instrument used to collect data from the variable (Y1) creative character is as follows:

 Table 2. Creative Character Instrument

Variable	Indicator	Descriptor	Question Points	Amount
Creative Attitude	Fluency in thinking	• Children can generate many ideas or answers to a problem	1.2	6
		• Children can produce something	3.4	
		 Children can develop an idea/ideas based on existing ideas 	5.6	
	Flexibility	 Children can see problems from multiple points of view 	7.8	4
		 Children can propose several solutions to problems with different approaches 	9.10	
	Authenticity	• Children create works that are different from their friends on the same theme	11.12	4
		• In terms of telling stories, explaining something, describing or demonstrating something, children display something different compared to their friends	13.14	

Elaboration	 Children can explain in detail their ideas Children make works carefully and in detail Children can compose stories that are rich in emotions and detailed descriptions of the 		7
	environment (M	Iunandar, 2009)	

The instrument used to collect data from the independent variable (Y2) is as follows:

 Table 3.Self-Reliance Instrument

Variable	Indicator	descriptor	Question Points	Amount
Independence	Physical Ability	Children can do toilet training	1.2	6
		 Children can operate feeding aids by themselves 	3.4	
		 Children can maintain personal hygiene 	5.6	
	Self-confident	 Children can make choices in processing Loosepart play activities 	7.8	6
		• Children dare to express opinions in a problem	9.10	
	Responsible	 Children dare to ask if they don't agree Children can 	11.12	2
	Responsible	complete the tasks given by the teacher	13.14	2
	Discipline	• Children are on time in carrying out each child's activities	15,16	4

	• Children can obey and run the rules of the game	17.18	
Easy to get along	 Children greet people who do not know 	19,20	6
	• Children can respect their friends' opinions	21.22	
	• Children can interact with their friends	23.24	
Mutual sharing	• Children love to share food and drinks with their friends	25.26	6
	 Children love to share toys with their friends 	27.28	
	 Children can lend their writing tools to their friends 	29.30	
Controlling Emotions	 Children do not disturb their friends when playing Loosepart 	31.32	6
	 Children do not scream when reprimanded by the teacher 	33.34	
	 Children are not moody when playing Loosepart is not finished 	35.36	

(Martinis, 2013)