MICROLESSON ON SKILL OF PROBING QUESTIONS

Name of the student teacher : Ann Theres Paul — Class : VIII

Subject : Mathematics — Date : 12/10/2022

Topic : Sides and Angles — Duration : 6'

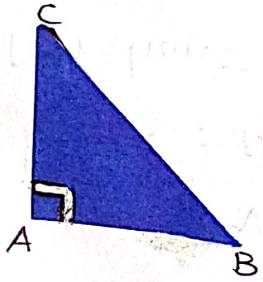
Name of Supervisior : Ms. Suneetha K G — Session : Teach

SKILL OF PROBING QUESTIONS

The skill of probing question may be defined as the art of response management comprising a set of behaviour or techniques for going deep into pupils responses with a view to elicit the desired responses.

COMPONENTS :

- Prompting
- Seeking further information
- Refocussing
- Redirection
- Increasing critical awareness

COMPONENT	TEACHER ACTIVITY	PUPIL ACTIVITY
	Student teacher enters the class and wishes Good morning to pupils	The students responded accordingly
	What do you mean by an acute angle?	Angle less than 90°
	Excellent	
	We are using acute angles in trigonometry.	
	Draw a right angled triangle and name it (Ram)	
	Good	
Seeking further information	Which is the largest side? (Sam)	BC

COMPONENT	TEACHER ACTIVITY	PUPIL ACTIVITY
	What is the name of the largest side in a triangle?	Hypotenuse
	Good	
	What is the opposite side of angle B? (Sita)	AC
	Good	
	What is the adjacent side of angle B? (Anna)	AB
	Good	
Redirection	Anna, Is this answer correct?	Yes
	Ok	
	Teacher explains,	
	Sine of an angle θ is given by, $\sin\theta = \frac{\text{Opposite Side}}{\text{Hypotenuse}}$	

COMPONENT	TEACHER ACTIVITY	PUPIL ACTIVITY
	So, What is sin B? (Shefin)	$\frac{AC}{BC}$
	Good	
Increasing critical awareness	How do you get it?	$\frac{\text{Opposite Side}}{\text{Hypotenuse}}$
	Excellent	
	What is sin C? (Dona)	$\frac{AB}{BC}$
	Good.	
	Cosine of an angle θ is given by, $\boxed{\cos\theta = \frac{\text{Adjacent side}}{\text{Hypotenuse}}}$	
	What is cos B? (Anu)	$\frac{AB}{BC}$
Increasing critical awareness	How can you justify it?	$\frac{\text{Adjacent Side}}{\text{Hypotenuse}}$

COMPONENT	TEACHER ACTIVITY	PUPIL ACTIVITY
	What is Cos C ?	$\frac{AC}{BC}$
	Correct	
	Tan of an angle θ is given by,	
	$\text{Tan}\,\theta = \frac{\text{Opposite side}}{\text{Adjacent side}}$	
	What is tan B? (Don)	$\frac{AC}{AB}$
Increasing critical awareness	How did you get it ?	$\frac{\text{Opposite side}}{\text{Adjacent Side}}$
	Good	
Refocussing	How is tan B related to Sin B and Cos B? (Dona)	Remain silent
	Teacher explains.	
	$\frac{\text{Sin B}}{\text{Cos B}} = \frac{\frac{AC}{BC}}{\frac{AB}{BC}}$	

COMPONENT	TEACHER ACTIVITY	PUPIL ACTIVITY
	$= \frac{AC}{BC} \times \frac{BC}{AB} = \frac{AC}{AB}$ ——①	
	What can we conclude from ① (Lakshmi).	No response
Prompting	What is tan B ?	$\frac{AC}{AB}$
	Then what is $\frac{\sin B}{\cos B}$?	$\frac{AC}{AB}$
Refocussing	Then how can you relate these two answers?	$\tan B = \frac{\sin B}{\cos B}$
	So, today we discuss the equations of $\sin\theta$, $\cos\theta$, $\tan\theta$.	
	$\sin\theta = \frac{\text{Opposite side}}{\text{Hypotenuse}}$	

COMPONENT	TEACHER ACTIVITY	PUPIL ACTIVITY

COMPONENT	TEACHER ACTIVITY	PUPIL ACTIVITY
	$\cos\theta = \frac{\text{Adjacent side}}{\text{Hypotenuse}}$ $\tan\theta = \frac{\text{Opposite side}}{\text{Adjacent side}}$ Thank You.	