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PROJECT TITLE: PROMOTING FORMATIVE ASSESSMENT: FROM THEORY TO POLICY AND PRACTICE (FORMAS)

GROUP B - SESSION 5



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Reflection time

 Reflect on your experiences with the actions you have undertaken since our previous meeting, to keep records of assessment results elicited from different assessment techniques and design assessment rubrics and checklists to facilitate your recording.

Take into account the following:

- Have you recorded assessment results? If yes, how and for which technique? If not, why?
- Have you tried to compare results for the same objective elicited from different techniques? Do you think this had an added value?
- Have you tried to design assessment rubrics/checklists? If yes, give examples and describe the process used. If not, why?



Take time to reflect

In the previous session:

✓ Using different types of assessment techniques in an efficient and systematic way (i.e. written/ oral/ performance) and keeping records ✓ Formulating assessment success criteria and designing assessment checklists/rubrics

In this session:

 ✓ Providing constructive feedback to students



Intended Learning Outcomes

- By the end of this session you are expected to be able to:
- 1) Distinguish between constructive and non-constructive feedback
- 2) Provide constructive feedback to students in an efficient way



Consider the following:

- 1. How do you communicate to students information about their learning?
- 2. How often?
- 3. From your experience do student use this information to take actions that improve their learning?





Reporting assessment results to students

 Reporting procedures deliver assessment results into the hands of the various intended users of the information in a timely and understandable manner and enhance the continuity and quality of students' learning experience.

Students should be the primary users of assessment information



Feedback in the mathematics classroom



- Enabling students to solve mathematical problems and questions in different ways has been strongly advised for the learning and teaching of mathematics.
- It is important that students feel comfortable to express their own solutions, even if a solution appears as less parsimonious than the one expected by the teacher.
- It is also important to give feedback by modelling appropriate mathematic language.
- Research shows that when students participate in mathematical discussions and conversations in their classrooms teachers can understand better whether students are making appropriate conceptual connections between words and their mathematical meanings





- The scenarios presented in the next slides describe the way that six different teachers provide feedback to a student about his/her performance on a task.
- 2. After reading these scenarios, consider the following:
- Do you identify differences/similarities in the ways feedback was given in these scenarios?
- ✓ If you were the student, which feedback would be more useful?



Feedback Scenario A

Teacher:

•Expand the expression (3x-2)(3x+2)

Student:

•*3x-23x+2=9x2+6x-6x-4=9x2-4*

Teacher's feedback:

•Correct, but this is not what I was expecting from you to do

Feedback Scenario B

Teacher:

•Expand the expression (3x-2)(3x+2)

Student:

•*3x-23x+2=9x2+6x-6x-4=9x2-4*

Teacher's feedback:

•Wrong! You are not applying what you were taught



Feedback Scenario C

Teacher:

Describe how to draw two perpendicular lines

Student:

- I take my "30-60" right-angle triangle' and I draw a line. Then I place the 30-60 right angle triangle in such a way as to have a right angle between the triangle and the line drawn. I draw the perpendicular line formed between the triangle and the line

Teacher:

- O.k., can you recall what is the measure of a right angle? Student:
- Yes, 90⁰.

Teacher:

 Very good, that correct. Can you explain us how you confirm that the way you placed the triangle forms an angle of exactly 90⁰ between the line and one of the sides of the triangle you placed?

Teacher waits for a few seconds

- Is there an angle on the "30-60" right-angle triangle which is exactly 90^0 ? Show it to me. Student:

- Yes, it is this one here.

Teacher:

- Show me the sides of the triangle which contain the right angle.

Student: (he/she shows the sides)

Teacher:

Are these sides perpendicular?

Student:

- Yes.

Teacher:

Very good. So, is there a way you can place the right-angle triangle on the line you have drawn to form a 90⁰ angle on a given point on that line?

Feedback Scenario D

Teacher:

- Describe how to draw two perpendicular lines Student:
- I take my "30-60" right angle triangle and I draw a line. Then I place the 30-60 right angle triangle in such a way as to have a right angle between the triangle and the line drawn. I draw the perpendicular line formed between the triangle and the line

Teacher:

- Wrong! Does any other student want to try?

Feedback Scenario E

Teacher:

•Expand the expression (3x-2)(3x+2)

Student:

•3*x*-23*x*+2=9*x*2+6*x*-6*x*-4=9*x*2-4

Teacher's feedback:

•Correct! However, can you reach the same answer applying a special case of factorisation you were taught?

Feedback Scenario F

Teacher: (to the class)

- Take your "30-60" right-angle triangle and draw two perpendicular lines.

Teacher: (after a couple of minutes)

- Raise up your exercise book and show me your sketches.

Teacher: (very pleased. Almost all the class has drawn 'perpendicular' lines.)

Feedback Scenario E

Teacher:

•Expand the expression (3x-2)(3x+2)

Student:

•3*x*-23*x*+2=9*x*2+6*x*-6*x*-4=9*x*2-4

Teacher's feedback:

•Correct! However, can you reach the same answer applying a special case of factorisation you were taught?

After reading these scenarios, consider the following:

Do you identify differences/similarities in the ways feedback was given in the above scenarios
If you were the student, which feedback would be more useful?

A discussion on the feedback scenarios is provided in the Application activity – Types of feedback (B5a) - Suggested Answers file in the Teacher Handbook.



Types of feedback

NON CONSTRUCTIVE

Approval: *"That's correct" "You've done well."*

Disapproval: "The answer is wrong" Reward: Extra grades Punishment: "This is wrong, do it again to find the correct solution."

CONSTRUCTIVE

Focuses on providing the learners with knowledge about:

- 1. The learning objectives and success criteria for the task.
- 2. The extent to which they have achieved the learning objectives and success criteria
- 3. How to close the gap between what they have done and what they could do by providing guidance for improvement

Constructive Feedback prompts

Reminder prompt

- *Remember the measurement rules about circles we talked about?*
- How is this problem like problems you have solved before?

Scaffold prompt

- What else can you try?
- What about the rule which says that the area of a circle is $A = \pi r^2$?

Example prompt

- Try using that diameter is twice the radius. For example if diameter is 12 then the radius is
- What if you were asked to find the value of y in the expression y = 2x 1 when x=3.

Remember, prompts need to be focused on the learning intention of the task and not provide students with a ready-made answer.



Feedback cautions

Make sure the feedback does not **think** for the student or do the **work** for the student!!!

- Re-do the exercise (too broad)
- > The answer here is 24 (too specific)
- Look at the process you followed to solve the exercise.
 Can you identify any mistakes?
- ✓ Five of these solutions are wrong. Find them and try to correct them.



Providing constructive feedback

For feedback to be effective for students, they need the following:

- ✓ an understanding of the desired goal
- evidence about their present position in relation to that goal
- ✓ guidance on the way to close the gap between the two

Feedback should always relate to the Intended Learning Outcomes (ILOs) that were stated at the beginning of the lesson.



Providing constructive feedback

Therefore you must:

- Focus on what is being learnt (learning objective) and how students should go about it (success criteria)
- provide feedback as the students are doing the learning
- provide information <u>on how</u> and <u>why</u> the student has or has not met the criteria
- provide strategies to help the student improve



Sadler's 3 Questions

Where am I going?

Roadmap Feedback

Where am I now?

Descriptive Feedback



How can I close the gap?

Constructive Feedback-feed forward



Constructive feedback can be used

Redirection

for

Reinforcement



Redirection identifies learning -related behaviors/actions that do not contribute to learning and help the student develop alternative strategies. Reinforcement identifies learning -related behaviors/actions that contributes to learning and encourages the student to repeat and further develop these behaviors/actions.



Some clues that constructive feedback is needed



A student asks you how well he/she is doing

A student's performance doesn't meet expectations

A student appears to have stopped trying to succeed

Errors occur again and again

A student appears surprised when you acknowledge mistakes



The Harry-Fletcher Wood Decision Tree





Adjusting your action plan for improvement



• At the beginning of the session you reflected on your experience of implementing your action plan.

•Based on this reflection and on the new content presented today, adjust your action plan.

- Remove actions that you found difficulties implementing and/or you found ineffective
- Continue actions that were helpful and were easy to implement
- Add new actions that relate to this session's objectives

You can use the sample action plan provided for ideas.





Next steps:



This is the final session of the TPD course. However, you are expected to continue working on improving their practice based on the aspects discussed throughout the five sessions.

Please complete the **Assessment Skills Questionnaire** again and send it by email to our research team (<u>formas@ucy.ac.cy</u>). Members of our team will analyze the data, inform you of your final evaluation results and provide suggestions on how your learning can continue.



TPD Formative Evaluation

- Please take some time to give us your feedback on the professional development program.
- Your comments/ suggestions are invaluable for the improvement of the program

To provide your feedback, please contact our research team: <u>formas@ucy.ac.cy</u>



Thank you for your time!

For support/ enquiries please contact: <u>formas@ucy.ac.cy</u>

