

STEM Education Service-Learning Project Reflection – Assessment Rubrics of Reflective Journal

RJ1 -The Impact of Your Service on the Recipients and Community

Our era of technological advancements also brought about information/digital divide in society.

- **The social issue:** How did your understanding of digital divide change as a consequence of this STEM education service-learning project? (Be specific and explain with detail.)
- **Your service:** To what extent do you think your STEM education service-learning project helped address in reducing the digital divide? Did you/your team achieve the learning outcomes (e.g., reflect on their role and responsibilities both as a professional in STEM discipline and as a responsible citizen) stated in your project proposal?
- **The recipients & community:** Did you observe any changes in your service recipients before and after they learnt STEM? What influence do you think the service experience will have on them in the long term?

Grade	Description	
A+	Excellent (9-11)	Content: <u>clearly</u> articulates the issue/concept; cites <u>specific</u> change(s) & gives <u>detailed</u> elaboration; shows <u>in-depth/critical</u> awareness of the problem; <u>thoughtful/sincere/reflective/engaged</u> quality; <u>explicitly</u> links ideas to subject/service experience; <u>cogently</u> supported by evidence, examples; <u>highly</u> observant of recipients Writing: <u>logical</u> flow or structure; <u>highly</u> comprehensible language/expression Comprehensive: <u>all three points</u> are answered <u>thoroughly</u>
A		
A-		
B+	Good (6-8)	Content: articulates issue/concept; cites and elaborates change(s); shows awareness of the problem; expresses <u>sensible, balanced</u> thoughts which are relevant to subject/service experience; provides <u>some</u> evidence/examples; observant of recipients Writing: <u>sensible</u> flow; <u>comprehensible</u> language/expression Comprehensive: <u>all three points</u> are addressed
B		
B-		
C+	Satisfactory (3-5)	Content: <u>general</u> or <u>emergent</u> discussion of issue/concept and/or change: <u>lacks</u> elaboration, detail, or support; contains <u>superficial, cliched, or one-sided</u> ideas; <u>limited</u> or <u>loose</u> reference to subject/service experience Writing: <u>readable</u> Comprehensive: <u>Neglects</u> or <u>inadequately</u> answers <u>one point</u>
C		
C-		
D+	Pass (1-2)	Content: <u>Limited</u> awareness of issue and recipients; contains <u>biased</u> or <u>implausible</u> ideas; overall <u>vague, underdeveloped, does not apply</u> or link to subject learning Writing: <u>irrelevant</u> writing Comprehensive: <u>Only answered one point</u> adequately
D		
F	Fail	Content: <u>No</u> awareness of issue and recipients; contains <u>incoherent</u> and <u>misleading</u> ideas; overall <u>disorganized, does not apply</u> or link to subject learning Writing: <u>Nonsensical</u> writing Comprehensive: <u>No point</u> is answered adequately

RJ2- Learning from Your Experience

Think critically about your positive and negative experiences from the STEM education service-learning.

a) What was the most *challenging incident or difficult part* of your service experience? What did/can you learn from teaching the service recipients STEM?

b) What was the most *memorable incident or rewarding part* of your service experience? What did/can you learn from teaching the service recipients STEM?

For each question, identify a concrete experience and go through the following steps: first, **DESCRIBE** what happened (what/who/where/when?); then, **EVALUATE** & **ANALYSE** your reaction (what did you feel/think when it happened? why did you react that way? what does your reaction say about you?); finally, **LEARN** (what did you learn? what would you do in a similar situation in the future?)

Grade	Description	
A+	Excellent (9-11)	● incidents behind (a) & (b) are <u>concrete</u> and <u>well-elaborated</u> /supported
A		● <u>both (a) and (b)</u> are answered methodically (discussed thoroughly following DEAL steps)
A-		● demonstrates <u>in-depth, personal</u> reflection
B+	Good (6-8)	● articulates <u>consequential, practicable</u> learning, in line with service-learning/course objectives
B		● incidents behind (a) & (b) are <u>identified</u> and <u>sufficiently</u> elaborated/supported
B-		● (a) <u>and</u> (b) are both considered methodically, one more excellently than the other
C+	Satisfactory (3-5)	● <u>sensible/thoughtful</u> consideration of experiences
C		● identifies <u>sound/plausible</u> learning points
C-		● incidents behind (a) & (b) are <u>mentioned</u> but <u>lack</u> elaboration/support
D+	Pass (1-2)	● (a) <u>or</u> (b) is not examined thoroughly or clearly (superficial or neglects some steps)
D		● tone is <u>disengaged/uncontextualized</u>
F	Fail	● learning points are <u>implausible/clichéd</u>
		● <u>mere/general</u> mention of incidents behind (a) & (b), <u>without</u> elaboration or support
		● (a) <u>and</u> (b) are <u>not</u> examined thoroughly or clearly
		● <u>underdeveloped; irrelevant</u>
		● learning points are <u>implausible/clichéd</u>
		● <u>no mention</u> of incidents behind (a) & (b)
		● (a) <u>and</u> (b) are <u>not</u> examined
		● <u>inaccurate; nonsensical</u>
		● learning points are <u>missing</u>