

The Role of Reflection in Facilitators' Professional Development within a PBL environment

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The role of reflection is a well documented practice among educators. Many can see the importance of this practice in the development of an educator's practice in the classroom. Journaling, classroom observations and community of practices are often cited as examples of good reflective practices which will enable educators to be more aware of their teaching strategy and to improve in their classroom practices. However, despite knowing the benefits and advantages of reflection, studies have also shown that not many educators actively reflect on their practice.

This study aims to look at the reflective practices of facilitators in Republic Polytechnic, which teaches using the One-day, one-problem™ Problem Based Learning methodology. This preliminary study will examine if facilitators in RP reflect on their classroom practices and the strategies that they used to reflect. Interviewees will also be asked the frequency of their reflection and if they can link changes they made in their teaching strategies to their reflection.

Reflection, Problem-Based Learning, Professional Development

Literature Review

Reflection is often seen as a skill that is important for both students as learners as well as for teachers in their professional development. Much research has been done about the role of reflection in education and teacher training. It can be concluded from these writings that the ability to reflect as an educator has a desirable outcome. Some positive outcomes include educators being better able to understand the thinking behind their teaching thereby leading to greater self-knowledge and awareness (see Kuit & Gill, 2001). This in turn makes reflection fundamental to the professional development of educators.

Hatton and Smith (2006) states that there are 4 broad approaches that promotes reflection. These are :

- (1) Action Research Projects
- (2) Case studies and Ethnographic Studies of students, teachers & classrooms
- (3) Microteaching and other Supervised Practicum Experiences
- (4) Structured Curriculum Tasks

They also add that within these broad frameworks, there are specific strategies which support reflection. Literature has shown that reflective practices such as journaling (Connelly & Clandinin, 1990), peer observations (Hammersley-Fletcher & Osmond 2005) and community of practices (Thorpe 2001, Kuit & Gill, 2001) are strategies used by teachers in their professional development. Each of these strategies helps the individual to look at different aspects of their practice.

Journaling provides a platform for one to reflect on one's practices. Moon (1991) summarised a few key purposes of journaling which includes the ability to develop learning in the ways that enhance ability to develop themselves; deepen the quality of learning; understanding of one's learning process, improving the quality of learning and facilitate the movement from learning from experience.

Hammersley-Fletcher and Orsmond (2005) states that peer observation is where peer observers act to provide observee an objective view of the teaching session and to review and reflect on that experience in a way that informs future thinking and practices. Hence, the presence of a peer in the classroom provides an additional dimension of the session which can be missing from personal journaling.

In addition, discussions within a community of practitioners provides a teacher a macro perspective of the teaching practice as it examine a different dimension of teaching. Rogers (2002) points out three "highlights" of communities of practice. Firstly, there is the affirmation of one's experience which can be dismissed as unimportant; secondly, individuals get to see the teaching experience in a new light when others offer alternative views of the teaching. Finally, the community provides support to engage in the process of enquiry which is required for reflection.

While there is a consensus on the positive outcomes from reflection, the literature identifies instances that can hamper reflection from taking place. Moon (1999) states that teachers/facilitators recognised that reflection is a valuable personal experience which would promote development of self and that reflection in learning can enhance the quality of learning. They would actively promote reflective activities among their students, but few teachers have the time and opportunity to practice reflection as part of their professional development.

Wildman & Niles (1987) developed a study that looks into the role of reflection in experienced teachers and observed that teachers needed to look at classroom events in an objective manner in order to reflect. Teachers need to be able to detach themselves emotionally from the events in the class and be able to identify areas which would influence their overall practice. However, their study also concluded that teachers rarely have that time and opportunity to do so, perhaps due to an "overfilled" curriculum.

Proposal

Republic Polytechnic practices a One-day-one-problem™ Problem Based Learning methodology. The basis of this pedagogy rests on the belief that learning is an individual undertaking that is can

be strongly influenced by “intelligently planned and executed engagements”. The One-day, one-problem™ is structured at two levels –

- (1) Planned curricula and scaffold where problems are crafted according to a set of learning objectives at a macro (module) level, and scaffolded by the facilitators in the micro (classroom) level.
- (2) Students chose their preferred way of learning within this planned curriculum and in a team setting. But within this structure, students are free to organise, discuss, evaluate, justify their findings according to their preference. They will also be given an opportunity to share their findings with the other teams.

(Alwis, 2007)

Facilitators within this system interact closely with the students and due to the dynamic nature of the PBL learning environment; facilitators have to be able to fine-tune their facilitation strategies to help the students learn. Reflection therefore can become an important tool for facilitators to adapt their facilitation techniques to support their students’ learning.

Like most educators, facilitators in Republic Polytechnic (RP) are often pressed for time. While the curriculum in RP may not be “overfilled” and the class size is capped at 25 students, facilitators faced similar time pressures indicated in the above studies. Facilitators are allocated between 2-3 classes each week and are expected to provide a daily grade and constructive feedback to each student in the class. This process can be time-consuming for facilitators, especially if they are new. Many facilitators also take part in many non-classroom activities involving the students, as the polytechnic emphasises the need to provide a holistic education for students.

However, RP recognises the importance of providing staff with opportunity to develop and learn. There are mentoring programmes provided for staff wherein they are observed in their classes by a mentor or a peer. A structured debrief follows the observations. Staff is encouraged to reflect on these observations and to modify their teaching strategies for the next class. An online journaling platform is also available for staff as an extension of the mentoring programme. They are encouraged to write down their personal reflection on role as facilitators. Mentors would provide feedback to the reflection record in this journal. The issue here is not the lack of platforms for staff to reflect but whether the staff are using these platforms to reflect. If they are, which mode of reflection are they using?

This paper is an initial research that aims to look at the role and impact of reflective practices in professional development of facilitators. This initial study will examine firstly, if facilitators are reflective practitioners. Secondly, it will examine the strategies they use in reflection. A future study is also being planned to examine the combinations of the various mode of reflection of RP practitioners and how it develops the facilitator as a professional.

Methodology

Data was collected via a questionnaire that was sent out to facilitators who have just undergone a 3-hour workshop on the role of reflection in professional development. This sample is selected

because all interviewees will have a similar concept and definition of the role of reflection in professional development. The questionnaire will gather data on whether facilitators are actively reflecting, as well as identifying the strategies they employ as part of their reflective practice. Staff will be asked about the frequency of their reflection and whether they were able to link changes they made in their teaching strategies to their reflection. The questionnaire is attached in Annex A.

Outcome of the investigations

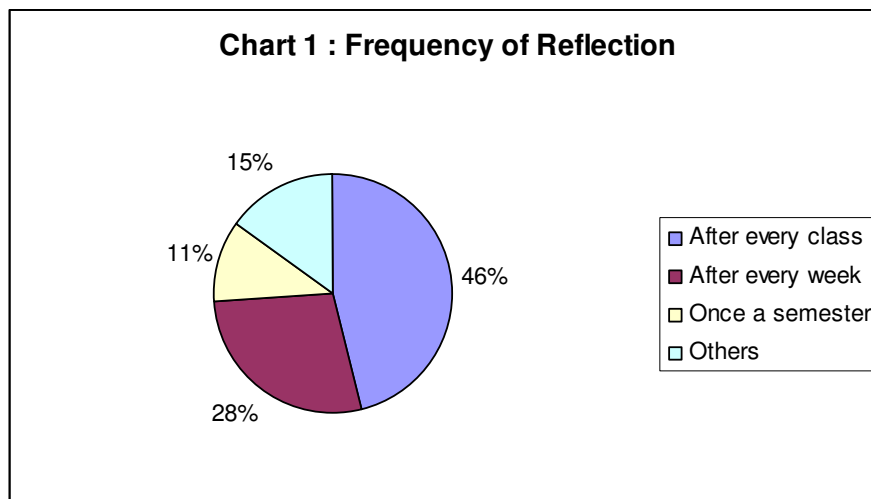
A total of 51 staff responded to the questionnaire which was sent to 141 staff members. The response rate is 35%. A summary of the data is presented in the table below.

Table 1 : Summary Data of Reflection Questionnaires

Statements	Yes
Actively reflecting in their practice	89%
Journaling as a reflective strategy	5%
Peer Observations as a reflective strategy	7%
Discussions with other facilitators as a reflective strategy	45%
Ability to link reflection to specific classroom practice	98%
Objective/goal for reflection	93%
Reflection as a regular practice	93%
Time spent on reflection: ½ hour or less	57%

Reflection as a practice

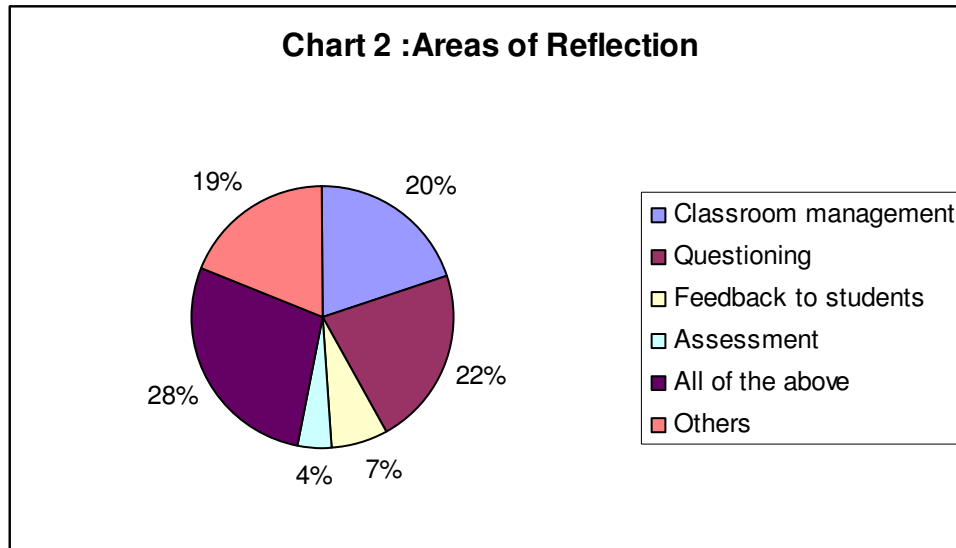
Based on the questionnaire, a high majority of the respondents do reflect (89%). Of those who reflected about their facilitation, 93% did it on a regular basis. The following is a breakdown of the frequency of reflection among facilitators.



This data indicated that facilitators are conscious of the need to regularly reflect and 74% of them would reflection at least once a week.

Areas of Reflection

The respondents were mixed the areas of the reflected with slightly more than 1/3 (36%) reflecting on more than one area of their practice. The chart below shows the breakdown of the areas where the facilitators reflect on.



Reflection in relation to classroom practice

98% of the respondents were able to identify a direct relation between their reflection and their classroom practice. In their written comments, staff could cite specific reflection which resulted in a change in the way they would facilitate in the next class. Almost all of issues highlighted in the reflection were deemed as negative actions by the facilitators and the change in the classroom was seen as an improvement to their previous action. The reflection tended to focus on specific actions and behaviours of the facilitators and its impact on the students' behaviour. There were 10% of facilitators who would reflect on the rationale behind their actions and behaviours and its implications on the students' learning. The respond to this question can be viewed in relation to the different levels of reflection that can take place for the facilitator.

Using the work of Schon on reflection, the respondents' level of reflection can said to be between 2 and 3 of the hierarchy of reflection described below.

- (1) **Knowing** – which can be defined as text book knowledge
- (2) **Knowing-in-action** – knowledge which comes from professional practice, where by knowledge is gain from the “act/behaviour”
- (3) **Reflection-in-action** – reflection takes place in the mist of action
- (4) **Reflection-on-action** – reflect on the “reflection-in-action”

Facilitators of this questionnaire are more focused on their action (level 3 – “Reflection-in-action”)and would think about their behaviours in the classroom and the result of that action on

the students' learning. Few facilitators would actually reflect at level 4 ("Reflection-on-learning), which is to reflect on the rationale of action in the classroom. However, measured against the context that 76% of the respondents have less than 2 years of facilitating experience, the result could indicate that the facilitators have reached the stage where they are comfortable to reflect on the rationale behind their actions in class.

Implications of findings

Reflection as part of staff development

While reflection as part of teacher education is very common, it is not formally part of the preparation for facilitators in the One-day, one problem™ process. The initial training for staff is a 5-day Foundation programme which focuses on the rationale and process of the One-day, one problem™ approach to learning. From the results of the questionnaires, facilitators' response indicates that they are more concerned about their "action/behaviour" in class and the behaviour they would like to see, then the rationale behind those actions. Currently, there is one workshop which facilitators can opt to attend and find out how to be more reflective as a facilitator.

Many schools and centres in RP have their own mentoring programme, but they differ widely from one another. While many facilitators can see the benefits of the mentoring programme, it is also a challenge to find suitable mentors who are available to work with their newer colleagues. Furthermore there is no standardise training for mentors to equip them to support their colleagues who is being assigned to them.

Readiness for certification as a One-day,one-problem™ facilitator

As part of the staff development process, facilitators are invited to be certificated by a panel of academics in RP's One-day, one problem™ process after facilitating for more than 1 year. The certification is an indication that they facilitator has attained a good of understanding and skills to facilitate the One-day, one-problem™ process. This certification process involves the submission of a portfolio which includes the facilitator's teaching philosophy, a review of feedback by their students, a critique of a problem they had used, and an evaluation of their assessment of students. The facilitators will also have their class video taped as part of the certification process. Facilitators will meet with the panel of academics for an interview whereby they will be asked to share their facilitation practice in class based on the video and their portfolio.

Preliminary results from an on-going research into the certification process has indicated that while facilitators are able to explain how their facilitation actions and behaviour in the classroom affects the students' learning, they often lack the understanding of the rationale behind the action. This lack of understanding in the rationale is one of the key reasons for facilitators not being certified.

This supports the findings in this research on reflection which indicates that staff are often reflective of their facilitation action in the classrooms, and the kind of behaviour they would like to see in their students as a result of those actions. But few facilitators reflect on the *rationale* of their facilitation action and implications for students' learning. This would certainly have an

impact on the certification process as many of the respondents in this questionnaire have yet to be certified.

Responses to the issues

The responses to the can be viewed at 2 levels:

(1) Staff Development Programmes

One response would be to put in place a structure whereby reflection is part of the new facilitators training and to start emphasising the importance of reflection as a practice right from the start within the Foundation programme. This can be part of the online learning module that new facilitators would need to go through for their compulsory training.

The Centre for Educational Development (CED) is also developing a training roadmap for facilitators which will include Reflection as a key module for development. This would put the workshop on reflection as a milestone programme whereby facilitators are strongly encouraged to attend to support them in their development. The workshop can also be modified to introduce practical strategies which the facilitators can use immediately in their reflection.

Another area would be to support the mentors in the various departments by providing them with the proper understanding of their roles and expectations as mentors. This can include workshops and guidelines for mentors on what to look out for to help their mentees reflect on their classroom practices. Schools and centres must support this programme by allowing for senior staff members to be trained as mentors and to include this activity as part of their regular workplan.

(2) Faculty Level

While there might be more staff development programmes, the faculty must be supportive of these programmes and to promote them actively among their staff members. Programme and module chairs must see that reflection is a valid and important development for their facilitators. Newer facilitators may be enrolled in workshops which can help them develop skills to reflect in and on their practice in the classroom. In addition, faculty can also support other reflective practices such mentoring and community of learners to take place. Faculty should encourage senior facilitators to undertake the mentoring role to assist newer facilitators in their efforts to be reflective. This can be done by including the mentoring role of senior staff as part of their yearly workplan.

Conclusion

This research has shown that facilitators in RP do have an awareness of the benefits of reflection and see themselves as reflective facilitators, who would regularly review their classroom practices. Many respondents were clear on the outcome of reflection and could identify the

positive linkages of their reflection to their classroom practices. Facilitators were also aware of the variety of reflection strategies that they can use in their practice.

However, the depth and quality of the reflective practices needs to be further investigated as a large majority of the respondents spend less than an hour for each reflective session within a social setting. This raises the issue of whether the facilitators are genuinely sharing issues and learning from one another, or that the sharing becomes one of “complaining” to one another of their students’ responses. Further studies could be made to establish the quality of reflection in the facilitators.

Facilitators also tended to reflect more on their facilitation action in the classroom rather than on the reason behind their action. While this may not be critical for “new” facilitators that responded to the questionnaire, it will be significant as they are up for the certification process. The impact of this can be seen in the increasing number of facilitators who are unable to demonstrate rationale behind their actions in class during the interviews at certification. More can be done by CED and the faculty to support the facilitators in their reflective practices, especially the move from level 3 to level 4 of Schon’s hierarchy.

It can be concluded that facilitators at RP are aware of the importance of reflection as part of their professional practice and the variety of strategies that they can use for reflection. However, many are still novices when it comes to being reflective as they seem to be reflecting-in-action. It would be ideal to have more research done to examine the depth and quality of the reflection of facilitators and the implications that it would have on facilitator development and student learning.

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Annex 1: Questionnaire For Research on Reflective Practices of Facilitators

Reflection Question : Yes, I do reflect

How long have you been facilitating? *

- Less than 1 year
- Less than 1 1/2 years
- Less than 2 years
- More than 2 years

How long has it been since you started reflecting on your facilitation? *

- 1-6 months
- 6-12 months
- 12-18 months
- 18-24 months
- more than 24 months

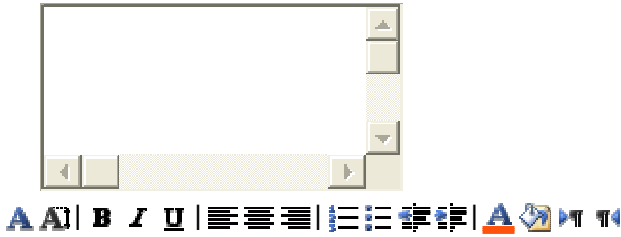
What are the areas of your facilitation that you reflect on?

- Classroom management
- Questioning
- Feedback to Students
- Assessment
- Specify your own value:

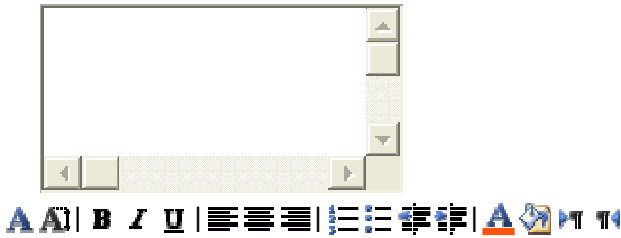
Do you have an objective to your reflection?

- Yes
- No

If YES, what is the objective?



If NO, why?



How often do you consciously reflect? *

- After every class
- After every week
- Once a semester
- Specify your own value:

How long do you usually take to reflect? *

- Less than 1/2 hour
- Less than 1 hour
- Less than 2 hours
- Specify your own value:

What strategies do you use as you reflect? *

- Journaling
- Classroom observations
- Sharing with other teachers
- Specify your own value:

How often do you journal?

Yes

No

Can you site specific examples of how your reflection changed the way you facilitated in class? *

No, I don't reflect

What is/are your reason/s for not reflecting?

- No time
- Don't know how
- Don't feel the need to
- No support
- Other reasons

If you did reflect, which method would appeal to you?

- Journalling
- Classroom observations
- Mentoring
- Discussing my facilitation with other facilitators
- Specify your own value: