Learning and teaching in clinical practice

A care improvement program acting as a powerful learning environment to support nursing students learning facilitation competencies

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ABSTRACT

Change management is an important area of training in undergraduate nursing education. Successful change management in healthcare aimed at improving practices requires facilitation skills that support teams in attaining the desired change. Developing facilitation skills in nursing students requires formal educational support. A Dutch Regional Care Improvement Program based on a nationwide format of change management in healthcare was designed to act as a Powerful Learning Environment for nursing students developing competencies in facilitating change. This article has two aims: to provide comprehensive insight into the program components and to describe students’ learning experiences in developing their facilitation skills. These three aspects were operationalised in five distinct areas of facilitation: increasing awareness of the need for change; leadership and project management; relationship building and communication; importance of the local context; and ongoing monitoring and evaluation. Over a period of 18 months, 42 nursing students, supported by trained lecturer-coaches, took part in nine improvement teams in our Regional Care Improvement Program, executing activities in all five areas of facilitation. Based on the students’ experiences, we propose refinements to various components of this program, aimed at strengthening the learning environment. There is a need for further detailed empirical research to study the impact this kind of learning environment has on students developing facilitation competencies in healthcare improvement.

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Introduction

The urgency of adequate nursing leadership in changing and improving care is evident. Nurses at the undergraduate level should play an important role in developing new organisational routines in quality improvement programs, such as the Dutch Care for Better Program [Langley et al., 1996; Øvretveit et al., 2002; Strating et al., 2011]. However, nurses’ leadership in improving healthcare practices has turned out to be complex and demanding (Span and Smits, 2013). It is not self-evident as is illustrated by the report on the Mid Staffordshire Hospital scandal (Francis, 2013). One component of this leadership in change management is the ability to facilitate professionals in their efforts to improve their practices. Moreover, facilitating effective work processes is a necessity (Crisp and Wilson, 2011; Harvey et al., 2002; Shaw et al., 2008). Facilitation is broadly described as ‘a technique by which one person makes things easier for others’ (Kitson et al., 1998, p. 152. In: Rycroft-Malone, 2004). Thus, the role of a facilitator is to design and enable processes that help another person or group maximise learning and capacity for action (RCN Practice Development Team,
Regional care for improvement program

As clearly described by Dixon-Woods et al. (2011), quality improvement programs are complex social interventions. Our Regional Care Improvement Program (RCIP) is based on a Dutch national care improvement program called Care for Better, itself based on the earlier Breakthrough Model used in projects worldwide (Langley et al., 1996; Øvrevoll et al., 2002; Strating et al., 2011). In Care for Better, the interdisciplinary improvement teams worked according to the Plan-Do-Check-Act method and received training and feedback from experts (Strating et al., 2008). The improvement teams of the various care organisations involved came together at national working conferences, where experts in change management and various domain specialists discussed best practices and demonstrated change methods. Evidence-based practices were implemented with multi-faceted methods, sharing knowledge and stimulating learning within and between settings (Zuiderent-Jerak et al., 2009). The Care for Better program has tackled over 25 improvement themes, ranging from medication safety to client involvement with the theme ‘fall prevention’ showing the best results (Stoopendaal, 2011; Strating et al., 2011). Although many projects resulted in successful improvements, it often proved difficult to ensure that such successes were sustainable (Slaghuis et al., 2011).

To answer the need for both sustainable improvement and an educational context that supports students’ learning facilitation competencies, we developed a RCIP (Stoopendaal et al., 2013, 2014). We added three ingredients to the existing Care for Better format: (1) strong collaboration between nursing school and improvement team; (2) regional orientation; and (3) Practice Development. The first extra ingredient involved students participating as full members of an improvement team and lecturer-coaches providing regular support throughout the 18-month program trajectory, covering three academic semesters. As novice facilitators, the students’ helped team members develop, execute and monitor the improvement plan. The role of the lecturer-coach was to facilitate the teams in their effort to improve the quality of care given, support students in their learning process, and enhance the collaboration between the contributing healthcare organisations and undergraduate nursing program. The second ingredient, regional rather than national orientation of the program, meant that the participating healthcare organisations were located at a workable distance from one another and from the nursing school. The third ingredient adopted Practice Development (PD) as a foundational philosophy to facilitate the envisioned, proven effective improvements (McCormack et al., 2009). Viewed as a way of improving healthcare practices, PD is defined as ‘a continuous process of developing person-centred cultures. It is enabled by facilitators who authentically engage with individuals and teams to blend personal qualities and creative imagination with practice skills and practice wisdom’ (Manley et al., 2008: 9).

At the start of the RCIP, managers of the involved organisations decided to focus on fall prevention in older people as the joint improvement theme. Six improvement teams were formed. Each developed a unique care improvement plan in accordance with local characteristics, and executed and evaluated this plan according to the Nolan model (Langley et al., 1996). Each team comprised a project manager, a Bachelor-level trained healthcare professional, two to three members of care staff, a quality manager, and preferably a client representative. Improvement teams received support regularly from the assigned lecturer-coach. All teams took on one or more students per academic semester. In the course of the program, 42 students participated: 12 students in the first semester, 15 in the second, and another 15 in the third semester.

Outline of the powerful learning environment

From an educational point of view, several measures were taken to shape the RCIP as a PLE that would help students develop as facilitators. Three PLE characteristics were considered: activation of facilitation concerns helping people to recognize and understand what they need to change; the second area has to do with managing the change process and involves clear definition and articulation of the role of leader, assisting groups in setting goals and action plans, administrative duties, knowledge translation and dissemination. The focus of the third area is on engaging the team, collaborating, communicating, enhancing relationships, mentoring staff, role modelling, providing advice, and encouraging the team to drive the change process forward themselves. The focus of the fourth area of interest is adapting the evidence or recommendation to the context and capability of a practice setting. The fifth and final area achieves its aim by organising regular meetings to assess progress and results, and acknowledging success (Dogherty et al., 2010). In accordance with the educational goal of the RCIP, these five areas of facilitation were operationalised in line with the three main characteristics of a PLE (Fig. 1).

A review of the literature identifies five areas of facilitation in evidence-based nursing: increasing awareness of a need for change; leadership and project management; relationship building and communication; importance of the local context; and ongoing monitoring and evaluation (Dogherty et al., 2010). The first area of facilitation concerns helping people to recognise and understand what they need to change. The second area has to do with managing the change process and involves clear definition and articulation of the role of leader, assisting groups in setting goals and action plans, administrative duties, knowledge translation and dissemination. The focus of the third area is on engaging the team, collaborating, communicating, enhancing relationships, mentoring staff, role modelling, providing advice, and encouraging the team to drive the change process forward themselves. The focus of the fourth area of interest is adapting the evidence or recommendation to the context and capability of a practice setting. The fifth and final area achieves its aim by organising regular meetings to assess progress and results, and acknowledging success (Dogherty et al., 2010). In accordance with the educational goal of the RCIP, these five areas of facilitation were operationalised in line with the three main characteristics of a PLE (Fig. 2).

Since facilitation was the main educational target, we designed a step-wise method involving all participants to enable students to develop their facilitation competencies. Two experts in PD facilitated two lecturer-coaches, who in turn facilitated students, project managers, and improvement teams. Lecturer-coaches and the students received training in PD components. Then, they were asked to facilitate the project managers and improvement teams by undertaking activities that relate to the five areas of facilitating. Students were asked to document in log books their activities for evaluation purposes (Stoopendaal et al., 2013, 2014) (Fig. 3).

Students’ learning activities and experiences in five areas of facilitation competencies

Students were fully involved members of the improvement team. They were supported and challenged in performing...
### Characteristics of PLE

| Activation of self-regulated learning | 1. Contributing to the development, execution and evaluation of the project plan  
2. Students are encouraged to propose changes in the care improvement plan, based on their own research data and findings |
| A problem-based learning environment | 1. Students may contribute to the problem definition process, study the nature and size of the problem, review literature on the problem, contribute to the implementation of the intervention, and measure the results of the new intervention.  
2. Students work together with healthcare professionals, researchers, fellow students.  
3. Students discuss intermediate facts and figures on fall prevention with care improvement team members. |
| Complex, realistic and challenging learning tasks | 1. Data collection, analysis, and reporting the results of fall incidences  
2. Project management  
3. Reporting and discussing (primary) findings of the improvement program |

#### Areas of facilitation, according to Dogerthy et al. (2010)

<table>
<thead>
<tr>
<th>Characteristics of Powerful Learning Environment, according to Konings et al. (2005)</th>
<th>Activation of self-regulated learning (lecturer-coaches and project manager)</th>
<th>Students’ complex, realistic and challenging learning tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A problem-based learning environment (context of RCIP program)</td>
<td>Students participate in top-down improvement teams. Not all wards felt the urgency to reduce fall incidents, and not all wards had the experience to improve their practices systematically.</td>
<td>Acting as full members of improvement teams, students executed qualitative and quantitative measurements of fall incidents and used the data to involve reluctant wards and team members.</td>
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</tbody>
</table>
| Increasing awareness of a need for change; leadership | | - present measurements/observations  
- inform team on the progress of others  
- inform team about evidence-based information on falls prevention  
- suggest internal/external strategies for communicating results/progress  
- use keen staff to involve the reluctant  
- literature study |
| Project management | Students were responsible for the Nolan phases: plan, do, study, act. Students who joined the improvement teams after six or 12 months had to fit in to running the project plans. | Each student was invited to contribute to each phase of the improvement plan: planned activities, clarified responsibility and assigned expected tasks to various participants. Self-activated learning was enforced with the Nolan phases (plan, do, study, act). Analysis of the literature on falls prevention and care improvement. |
| | Students were invited to contribute to each phase of the improvement plan: planned activities, clarified responsibility and assigned expected tasks to various participants. Self-activated learning was enforced with the Nolan phases (plan, do, study, act). Analysis of the literature on falls prevention and care improvement. | act as meeting chair or vice-chair  
- compose drafts of the project plan  
- give feedback to project manager  
- develop a realistic timetable  
- encourage the team to work on the improvement plan goals  
- act as a leader in improving care practices  
- responsible for handover to a new cohort of students |
| Relationship building and communication | Students confronted project managers and staff who were not or partly willing to participate in the project. - Some project managers had been more or less forced to join this program. - Some project managers had little experience with communication strategies and plans. - The 2nd and 3rd groups of students had to establish themselves in that had worked together for 6-12 months. | Students were asked to build relationships with team members and ward professionals. They were encouraged to reflect on their personal role and views and set up relationships aimed at improving practices. |
| | | - develop communication plans to inform and engage the (1) ward, (2) division, and (3) whole organization. Students were encouraged to:  
- discuss resistance on the ward with the manager  
- discuss the manager’s understanding of the project and involvement |
| Importance of the local context | Specific features characterize each context. Project plans were set up in accordance with these. Improvement teams were encouraged to share and discuss their differences. | Students were encouraged to share their findings and experiences in improving their own practices. They met several times during the project, which helped them learn different approaches, findings and results. Different approaches were encouraged. |
| | | - share findings with other teams  
- fit the content and method of their plan in the context of their own ward  
- explore, with others, how to overcome any resistance |
| Ongoing monitoring and evaluation | Nurse professionals are not used to pay prolonged attention to one theme. They are not used to monitoring their practices systematically. | Students were supported in repeated data collection (fall incidence and observational investigation), and encouraged to reflect on and discuss the findings; to adjust the interventions; and (if necessary) the project plan. |
| | | - ongoing process of collecting data, analysing and presenting the results  
- use PD methods to clarify claims, concerns and issues  
- propose ways to progress |

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activities in all five different areas of facilitation. All students reported diverse activities and experiences in their facilitation of the aimed improvement in fall prevention. We present these in the order of the five areas of facilitation: 'increasing awareness of change', 'project management', 'monitoring and evaluation', 'relationship building, and communication' and 'working in a local context'.

1. Increasing awareness of a need for change; leadership
(helping people recognise and understand why and what they need to change)

An important responsibility for students was to organise and monitor the collection of quantitative and qualitative data on fall incidents in elderly patients. Most students were very keen on data collection, and helped members of staff to report each (near) fall incident in a structured way. They analysed the falls incidence data, and discussed the results with members of staff. The research team, evaluating the impact of this RCIP on fall prevention, also asked the students to compile qualitative data based on their own observations of dangerous situations. They took photographs of corridors, where parked wheelchairs blocked handrails, and made notes of their observations. This process made students aware of their ability to see (potentially) dangerous situations, and of the power of using their notes to try to inform as many colleagues as possible. They did not rely solely on formal meetings, but used unplanned, unstructured encounters such as coffee breaks and lunches to put their findings in the spotlight. Students also became aware of the influence of members of staff who were in favour of change. These professionals had the power to stimulate and support people in their change efforts. Students discovered that enthusiastic staff members could make a difference by helping others to stay in focus and involved in improving their fall prevention practices.

2. Leadership and project management
(managing the change process)

As members of the improvement team, students assisted the project manager in various ways. They helped organise meetings, took turns at co-chairing, and set the agenda. They incorporated new PD working methods in facilitating these meetings. All teams definitely appreciated two methods in particular. The first method was structured discussion of the claims, concerns, and issues of all members of the team. The second was starting the meeting by giving each attendee the opportunity to raise any questions regarding the improvement process. In general, students experienced this as a very fruitful way of giving each member a voice in the meeting.

Students facilitated their team members in taking the 'plan-do-check-act' steps, in defining the problem of the ward, and the goals that they wanted to achieve. Students felt that they played an important role and that it mattered what they did. One student said, “I felt as if I were the owner of the whole project.” Another student reported, “Everything I did was for real, the members of the improvement team listened to what I said.” One lecturer-coach observed the difficulties students faced in trying to facilitate team members in taking the improvement steps in daily care. At the start of the project, however, some students were unsure of their role. They asked: “What am I supposed to do in the care organisation?” and, “How can I meet the requirements of my education?” Therefore, the lecturer-coaches started each new group of students off with a lesson on the project, the students’ role and the task they could proceed within the institutions. Communication with students focused on balancing the things students had to do for their personal educational goals and those they had to do for the improvement program.
3. Relationship building and communication

(engaging, collaborating, communicating, enhancing relationships, mentoring staff, role modelling, providing advice, encouragement)

Students enhanced their facilitation skills by building a relationship with the members of the improvement team and staff on the ward. They had regular meetings with project managers, ward managers, staff, and one-to-one contact with co-members in the institution. This taught students the importance of communication with those who can influence change in daily care on the ward. Some students had problems communicating with ward staff. They met some resistance because a considerable number of ward staff did not know the students or the goal and intentions of the project. Students who were not regularly on the ward experienced resistance from their colleagues, who felt only slight or no facilitation due to the student’s absence. On the other hand, students who managed to establish relationships with ward staff made good progress and had long-lasting success.

At the beginning of the project, the students wrote a draft improvement plan for feedback from the improvement team members. The lecturer-coach explained their role as facilitator but, initially, students sometimes felt uncertain. To achieve improvement of daily care students had to learn the importance of attuned communication with members of the improvement team. These members have to deal with more work obligations than the project alone. This is how all staff became owners of the project and proposed improvements. Students felt that they acted as a kind of reminder for ward staff.

It was not always easy for students to continue a project started by other students. However, in contrast, with the arrival of a new student, the whole improvement team experienced a fresh impulse to complete previously set goals. A new student, stimulated by her experience, overcame the obstacles associated with falling. Students experienced the importance of fitting recommendations for change to the particular context, such as the ward, home-care setting, or nursing home. The lecturer-coach gained understanding of local needs by attending improvement team meetings in the institutes and was thus able to facilitate the team on their own ground. For example, one improvement team met resistance from other staff on the ward, who did not want to participate in the project and refused to track the fall incidents. The lecturer-coach contacted the ward manager and together they sought an answer that suited all involved. This example of facilitation helped the students to adopt facilitation actions and styles.

5. Ongoing monitoring and evaluation

(organising regular meetings to assess progress and results, and acknowledging success)

Students collected both qualitative and quantitative data on falls and near falls. They presented and discussed their findings with the improvement team and ward as a whole. Taking these measurements taught them that staff did indeed become aware of the size and importance of the problem. For example, one staff member was convinced that her ward had few fall incidents. She was amazed by the actual number of fall incidents. Her experience contributed to the legitimisation of the project on the ward and led to the students experiencing less resistance to improvement.

Discussion

The goal of this article was to describe our Regional Care Improvement Program from an educational viewpoint, focussing on how it acts as a powerful learning environment in which students can learn and experience facilitation competencies. In this PLE students worked in close partnership with professionals in a real life change management situation. Integrating PLE concepts with principles derived from Practice Development offered a suitable frame for describing the facilitation activities actually seen. The activities and experiences correspond with several aspects or dimensions of complex improvement programs, such as networked community effects, changing practice and culture at the sharp end by using interventions with different effects, and using data as a disciplinary force (Dixon-Woods et al., 2011). Moreover, this particular RCIP supported sustainable improvement of fall prevention (Stoopendaal et al., 2014). The RCIP matched various PLE characteristics: a problem-based learning environment; activation of self-regulated learning and complex learning tasks. Students were able to perform activities related to competencies in all five areas of facilitation as defined by Dogherty et al. (2010): (1) increasing awareness of need for change, (2) project management, (3) relationship building and communication, (4) working in the local context, and (5) monitoring and evaluation. Training in Practice Development, fall prevention techniques, and learning how to collect and analyse data are all important factors in developing students’ professional skills, supplemented by the personal support of and communication with project managers and lecturers (Ibsen and Bjerk, 2010; Brown et al., 2008a, 2008b). Professional dialogue and critical reflection, as reported by the students, are well-established tools for refining the learning process (Skaalvik et al., 2012).

This RCIP can be described as a successful PLE. However, based on students’ reported activities and experiences, the current format needs refinement in at least two aspects. First, although students...
received PD training, more comprehensive systematic training is needed in all five areas of facilitation before and during their involvement in the RCIP. This will help students focus on attainable aspects of each five areas of facilitation, depending on their learning goals and learning context. It will provide effective support in ‘translation work’ (Stoopendaal and Bal, 2013), an important aspect of implementing change. Secondly, the complexity of the PLE can be reduced by selecting improvement teams who already have experience in systematically improving practices. Their experience might help facilitate students in their role as facilitators. If teams are familiar with the improvement program format, it is expected they will have greater capacity to focus on students as well. Besides, more comprehensive training in mentoring will assist teams in supporting students.

Finally, the benefits and impact of various components of the current RCIP on students’ learning requires further research in at least two areas. The first area relates to develop and study learning outcomes of this PLE in the domain of facilitation. We propose foc on both the acquired competence level and the outcome of these competencies. The second area of research should be on the nature and impact of this RCIP on developing students’ leadership in change management and care improvement.

Limitations and strengths

This developmental project is firmly based on research, education, and practice but some limitations deserve attention. Although nine care improvement teams participated, only one educational organisation was involved, which may have led to a singular situation. This risk is somewhat attenuated by the involvement of a steering group of national experts in the area of care improvement and falls prevention. The evaluation format was set up to allow redirection of the program where and when necessary. Interviews, observations and minutes of group evaluations by various sources (students, researchers, project managers) permitted the data triangulation that benefits the validity of this PLE description. Since the study was not designed to study the specific development, improvement or effects of facilitation skills in this RCIP, we do not know whether students actually learned these skills and to what degree in this particular PLE. Finally, project managers received no specific training on how to mentor students in developing their facilitation competencies. Such training may help in shaping a comprehensive, safe learning environment for students developing new skills and processes.

Conclusions

The students’ actual learning activities and experiences demonstrate that an RCIP format for a care improvement program can act as a PLE for undergraduate nursing students learning competencies in the domain of facilitation. This article gives important input on an educational format that pays systematic attention to the development of facilitation competencies. Further improvements to this particular learning environment are necessary and additional research is needed to study its benefits and impact on students’ learning outcomes in this area.

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