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Giving student groups a stronger voice: using participatory research and action (PRA) to initiate change to a curriculum

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Traditional student feedback mechanisms have been criticised for being teacher-centred in design and, in particular, for their absence of transparent follow-up actions. In contrast, this study describes the process and the evaluation of a participatory research and action (PRA) approach used in an undergraduate physiotherapy degree. This approach aimed to give students a stronger voice in order to identify the issues they felt were most important and to involve them in the subsequent actions to change or influence their curriculum. Using group consensus, key areas were identified by the students using a variety of PRA techniques, solutions were recommended and some actions were implemented. Both students and staff maintained that the process had gone some way to empowering students and had begun a ripple effect in relation to student involvement in ongoing curriculum design and debate.

Keywords: participatory research and action (PRA); empowerment; group consensus

Introduction

Traditional methods of gathering student feedback on curricula have included a range of evaluation tools, but they are not without their critics (Fisher & Miller, 2008; Wilson, Lizzio, & Ramsden, 1997). Two of the key criticisms noted are that: (1) they are not always valid as the tools do not ask the questions the students want to answer (Edström, 2008; Hendry, Cumming, Lyon, & Gordon, 2001) and (2) the timing is such that the students do not see any action, if indeed there is any action (Fisher & Miller, 2008; Giles, Martin, Bryce, & Hendry, 2004). In particular, the end of semester questionnaire has been criticised for its poor content validity, as it often measures a narrow range of teacher-centred questions (Edström, 2008; Saroyan & Amundsen, 2001). More student-centred techniques go some way to addressing this: i.e. structured student feedback, nominal group techniques (Hendry et al., 2001). However, although these address the issue of gathering valid information, they do not necessarily highlight or implement actions to improve the curriculum. It is difficult to judge how student feedback has informed changes to curricula and, in addition, students often complain that nothing is done (Hendry et al., 2001).

In order to address these criticisms, we wanted to use, and to continue to use, an approach that would both gather 'valid' student feedback (strengthen their

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voices) and involve them in changes to their curriculum. The programme that we were involved in was the undergraduate physiotherapy degree in University College Dublin, Ireland. The programme was in the process of undergoing a curriculum review and staff were also keen to use an approach that would not only gather data on the current status of the programme but also have an ongoing feedback and action emphasis. We looked, therefore, to the action research literature and we identified a particular action research approach, i.e. participatory research and action (PRA) (Chambers, 1997; Holland, Blackburn, & Chambers, 1998; Institute for Development Studies [IDS], 2010; Kane, 2007; Participatory Research & Action Network [PRAN], 2010). In preparation for using this approach, one author attended a PRA training course.

The purposes of this paper, therefore, are to: (a) describe how we used a specific action research approach (PRA) and (b) evaluate its success in giving students a stronger voice to inform and initiate changes to their curriculum. The initial focus of the research was related to the students' clinical practice experience throughout the programme.

Action research: fundamentals and variations

Action research is a term that has been used to describe many versions of research involving action. Elliott (2001, p. 49) described that the fundamental aim of action research 'is to improve practice rather than produce knowledge'. The terms used to describe action research are varied and reflect different philosophical and contextual emphasis (Chambers, 1995; Elliott, 2001; Gray, Chang, & Radloff, 2007; Somekh & Zeichner, 2009). Fundamental to action research is a cyclical process of planning, action, observation and reflection. Somekh and Zeichner (2009, p. 5) describe this process as 'working towards a resolution of the impetus for action in a reflective process of enquiry and knowledge generation, to generate new practice'. However, although there are fundamental aspects to action research, Somekh and Zeichner (2009) elaborate on the varieties of models used in educational practice.

Cohen, Manion, and Morrison (2007) separate this variety of approaches into two camps: (1) The Reflective Practitioner model (proponents: Stenhouse & Schon) and (2) Critical Theory Emancipatory model (proponents: Carr & Kemmis). Their histories and implementations are significantly different. The Reflective Practitioner model has been more commonly associated with education and health sciences research, whereas the latter has been more commonly, but not exclusively, associated with rural development and sociological research. One of the key differences in these approaches is that the Critical Theory Emancipatory model emphasises the involvement of the participants (Taylor & Pettit, 2007). Participatory approaches in education have emerged as a means of not only promoting inclusivity, but also recognising and shifting power structures, and ultimately contributing to social change and transformation (Taylor, Pettit, & Stackpool-Moore, 2006, pp. 174–175). The Critical Theory Emancipatory model, in particular, has been used with those in more vulnerable 'voiceless' positions (Holland et al., 1998), hence its application in developing world projects (IDS, 2010; PRAN, 2010) or with more minority groups in education (Robinson & Meerkotter, 2003). 'It is as political as it is educational' (Cohen et al., 2007, p. 302).

One of the approaches linked with the Critical Theory Emancipatory model is the 'PRA' and is the approach used for this study (Chambers, 1997; Holland et al.,

1998; Kane, 2007). Similar to some other action research approaches, PRA embraces the emic research concept. Kane and O'Reilly De Brun (2001a, p. 37) describe that in emic research, 'participants tell you how they see things ... the participants create their own categories'. In contrast, they describe that etic research is based upon the researcher determining the objectives, the variables and the questions, often described as a positivistic approach.

The PRA approach embraces many of the principles associated with the Critical Theory Emancipatory model, in particular, as it is often used within community-based research, it emphasises 'group consensus'. It also has some very practical methods for documenting and acting upon the group voice. The participating students in this study would not typically be described as 'voiceless' and differ to some groups involved in PRA (see, e.g. IDS, 2010; PRAN, 2010). These students are performing well in higher education and are, in general, from middle-higher socio-economic groups. However, from the authors' experiences, clinical practice brings them into an area in which they are less comfortable and less inclined to voice their views, as (1) it is an area in which they now need to *apply* their knowledge for the first time, (2) they are no longer in the support of the class group and (3) they are being assessed by potential future employers.

PRA: some methods

PRA uses some methods common to many research approaches, i.e. surveys and interviews. However the approach, with its emic research orientation, has developed some quite creative research methods, such as: card sorts, mapping, modelling, Venn diagrams, matrices, seasonal calendars, pie charts, scenario development, open discussion and extracts from discussion notes (Kane & O'Reilly De Brun, 2001b). The methods used in this study focused primarily on pie charts as a means of initial identification of issues and this was followed by more action-oriented methods: i.e. scenario development and solution identification. It was considered that these methods were appropriate for the initial research stage.

Pie charts which are used in quantitative research to summarise statistical findings are used very differently in PRA. In PRA, they are used as both the methodology and to present the results based on a group consensus. The participants in the group are given a blank sheet, or space on the ground in more rural development research, in which to illustrate important issues to them. They negotiate the importance of these issues, emerging from their discussions, by weighting them into segments on the pie chart. It is therefore not a statistical but an approximated group consensus. The discussion is carefully recorded and is a significant component of the pie chart recording process. Kane (2007, p. 14) describes some of advantages of the pie charts as: people can see the large diagram easily; the axis can be rubbed out (or moved) and changed and people feel free to do it themselves. Kane maintained, however, that to get more than just a weighting of the issues, and to initiate some ideas for action, other methods are needed, for example: identification of group solutions; options assessments and resources needed to carry out these solutions (Kane, 2007, p. 89). In this study, scenario development (real-life clinical experience examples) is used as one method that elaborates on the issues. This is similar to Kane and O'Reilly De Brun (2001b) story completion or traditional story development approach in PRA. Finally, setting action plans with the participants is a key component of all PRA research.

Methodology

All final year students on the four-year BSc physiotherapy course ($n=61$) were invited to an initial half-day PRA session. At this point, the students had completed 22 out of 32 weeks of clinical practice. They were informed that the main purposes of this session were:

- to gather their views on clinical practice issues/difficulties, including how these related to the full curriculum and
- to involve them in solutions and actions to improve their, and the next cohort's, undergraduate curriculum.

The students were asked to attend either a morning or an afternoon session. Thirty students attended the morning session and 28 attended the afternoon session (total = 58). Using the pie chart as the method, both student groups were asked to discuss the question: 'What are the main issues for you on clinical practice ...?' (see Figure 1). Following this, the students of the morning group were asked to develop some group solutions, whereas the students of the afternoon group were asked to develop scenarios based on their issues. Both sessions were facilitated by a PRA researcher not known to the students and were co-facilitated by the Practice

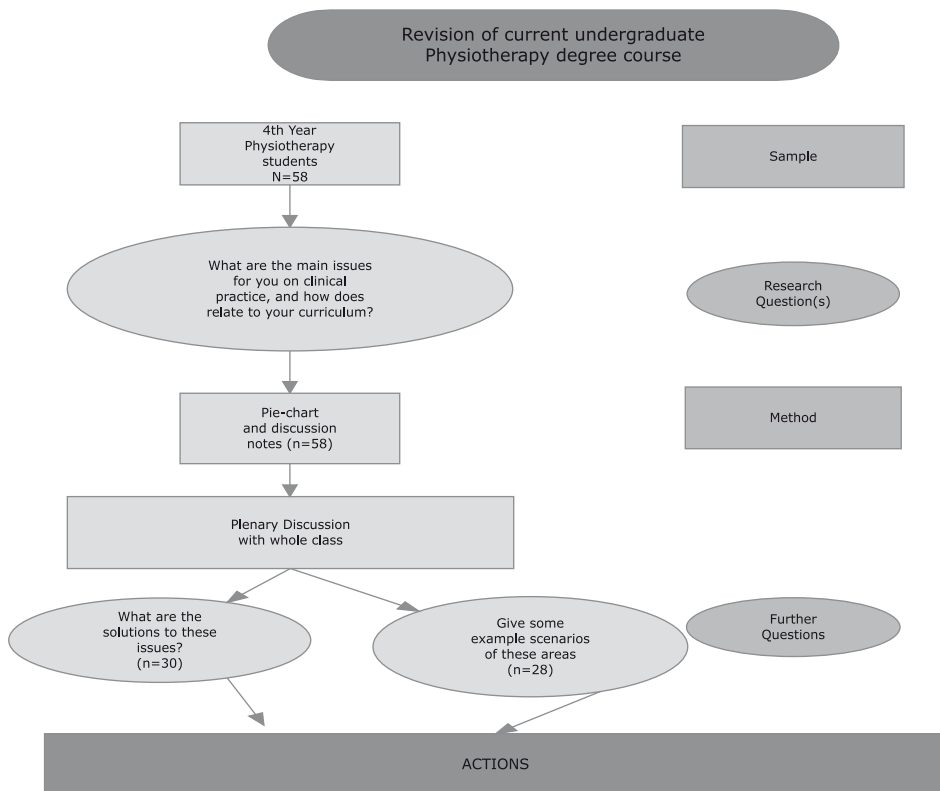


Figure 1. The overall plan for the initial PRA session.

Education coordinator (School staff member) who was known to the students (i.e. the authors of this paper).

Identifying the issues: the pie charts

In order to manage the session, students were divided into groups of five and were invited to nominate a Student Chair, a Scribe and a Discussion Recorder in each group. The PRA researcher emphasised the importance of group consensus and gave some clear written and verbal instructions to each group on how to make the pie charts based on their discussion. The PRA researcher and Practice Education coordinator were present during this process and moved around the parallel groups. Our role was to listen to the discussion, clarify the process or ask further probing questions on the issues that arose. Once individual experiences were discussed, they grouped these issues under themes which were then represented on the pie chart. Once the pie charts were negotiated and formed, the Chairs of each group were asked to present the results of their pie charts to the whole class (see Figure 2, as example). Notes were also taken by the PRA researcher on the discussion that arose out of this plenary session.

After the pie charts had been presented to the class group, students then had either further discussion on the solutions to the most common themes presented or to elaborate on examples through the use of their scenarios. It was explained that the solutions would be fed back to staff involved in the programme and the scenarios would be used as catalyst for future discussions with students, staff and clinical supervisors.

Further PRA data analysis and actions

Data collection, analysis, action and dissemination in PRA are part of an iterative process. Some results gathered on the day in the initial process, such as the pie

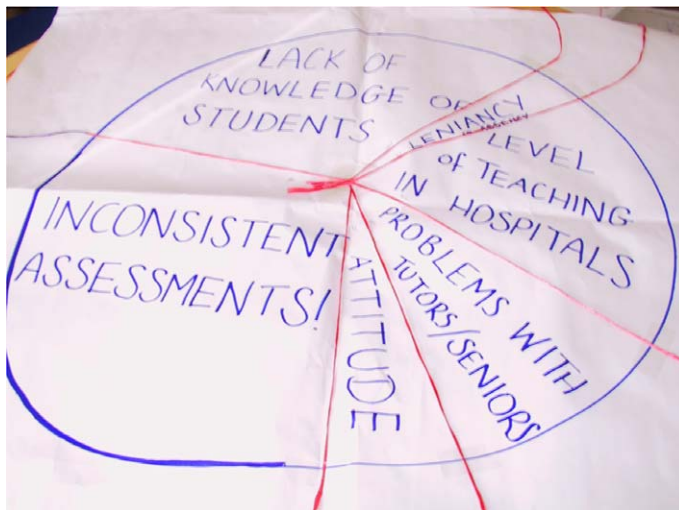


Figure 2. Example of a pie chart from one group.

charts, were synthesised by the group and immediately disseminated back to the group. However, further reduction of the data across the multiple groups was performed by us in order to help prioritise the issues for action. Despite 10 different student pie charts in the study, many common themes started to emerge with similar themes from both the morning and the afternoon groups. In order to assist in the aggregation of pie charts, we followed the steps recommended by Kane (2007, p. 5). Following careful analysis and cross-comparison of the issues identified in the pie charts, we (both authors of the paper) came to an agreement on the language of the common themes. For example, 'inconsistent assessment', 'inconsistent marking' and 'lack of standardised assessment' were grouped as 'inconsistency in assessment'. The next step was to take the pie chart with the most segments ($n=6$) and use this as the base number. Following this, each item in each pie chart is given a number, starting with six for the biggest (even if there are only four segments) (Kane, 2007, p. 5). The final step, in order to aggregate for the whole sample, was to add the score for each issue and divide by the number of groups ($n=10$). Using this approach, the six issues ranked highest by the students were identified, the two highest being: 'inconsistency in assessment' and 'inadequate practical preparation for placement'.

The pie chart was used not only to summarise the group consensus, but also as a catalyst for further discussion on the issues. The discussion notes taken by the PRA researcher and the student Scribes gave more elaboration on some of the complexities behind these issues. In the 'inadequate practical preparation for placement', for example, students elaborated that:

We are really under-prepared in comparison to other students we need more neuro & respiratory practicals ... No point in getting lectures on obscure topics that we can read up on it would be better to do more practicals on assessment and treatment of things we will see more often. (Group 6)

Equally the discussion around 'inconsistency in assessment' covered a range of issues. For example:

Some people mark you on your personality and how outgoing you are not on your ability, this is not fair. (Group 10)

Some don't give 1sts. (Group 3)

The solutions recommended by the students in the process also needed to be reduced into manageable synthesised data. For time-efficiency purposes, these data were documented onto a flip chart during the session and following this, we transcribed and reduced into solutions that were: (1) immediately actionable and (2) actionable in the long term for the undergraduate programme. The rationale for the first category was that it allowed students to have immediate feedback on actions that affected them, as is appropriate in a PRA approach. The second category allowed the results to be fed into the long-term design of the curriculum. In relation to the 'Immediately actionable' category, students had identified an urgent, but not heavily weighted, issue regarding their status in relation to receiving training and implementing first aid while on placement. This issue was clarified and immediately communicated to the students. In relation to the category 'Actionable for the long term', three significant

actions were identified and later put into action: (1) an Education Forum was set up to review the practical components in the curriculum, with a membership of academic staff members and practice supervisors; (2) students were invited to the design phase of some new modules in the curriculum and (3) a Clinical Review Meeting Series was established for reviewing ongoing student-initiated clinical issues.

Evaluation of the PRA process: students and staff views

The success of the PRA approach in relation to student action and empowerment was explored with both the full student sample group ($n=61$) and using a convenience sample of experienced academic staff ($n=3$) involved with these students. Three months after the PRA session, the student group was invited to give their views, using an in-class structured discussion forum, on return to the University following a period of time on placement. They had been informed of the actions that had occurred since the PRA session. Three experienced staff on the programme were also interviewed on how they perceived the impact of this PRA approach. A constant comparison analysis was used to analyse the data from both the students' structured group discussion and the transcribed staff interviews. Three key themes emerged following this data analysis: Group Dialogue & Negotiation; Student Involvement in Transparent Action and Neutral Facilitator.

Group dialogue and negotiation

This had been the first experience, by students and staff, of a PRA approach. The group dialogue and the resulting negotiation was one of the key themes that emerged from the students in particular:

It was good because we all got to say what we wanted and the strongest person's views could not take over. (Student)

It was good to have to agree the importance of each issue. (Student)

Students were reassured by the fact that fellow students had similar clinical experiences and found it equally challenging. They described that this was one of the first opportunities to have a group dialogue related to their clinical placement issues.

Student involvement in transparent action

The transparency of the implementation of immediate action also emerged as a theme from the students' evaluation. For example, both the resulting implementation of first aid training and a college meeting with clinical staff had not gone unnoticed by the students, who felt they had been involved in this action:

You really felt like you had an impact. (Student)

Yes, some of the staff, in the hospital I was in, mentioned they had been into the college to discuss the course. (Student)

Staff also highlighted that the transparency of action was a positive aspect for the School, for their professional accreditation and, in particular, for student empowerment:

I know that one of my dissertation students mentioned very quickly how an issue (around first aid) was resolved following the session and I think that is good. (Staff)

I also had a student comment how it was great to feel what they had said was heard and something done about it. (Staff)

Some staff, however, did have concerns on how much action should take place based on the students' views. They did not '*want to see us (the staff) react every time ...*'. Changes in curriculum, they felt, should be allowed time to settle. However, one staff member suggested that action need not necessarily be changing a curriculum. She described that this can include the action of communicating to the students the rationale for why curriculum changes cannot occur, thereby presenting a broader view of what could be defined as 'action'.

Neutral facilitator

Students had noted, in the evaluation, that they felt reluctant to make negative comments regarding clinical experience while on placement, as they perceived their clinical assessment marks would be influenced by these comments. The PRA process, using an independent facilitator, had allowed them to voice opinions in an environment that would not affect their grade. They commented that it was very beneficial to have a more neutral person involved in the feedback, i.e. the PRA researcher and/or the Practice Education coordinator. The benefit of this was also fed back to us in more informal meetings of staff and students.

Discussion

The purpose of this study was to: (1) describe how we used a specific action research approach and (2) evaluate its success in giving students a stronger voice to inform and initiate change to their curriculum. It is not surprising, given the PRA approach was used because of its emphasis on action, participation and group consensus, that the themes emerging from the study were: Group Dialogue & Negotiation; Student Involvement in Transparent Action and Neutral Facilitator.

The students highlighted the benefits of having a neutral facilitator to hear their voices. To some extent, on the surface, this appears to go against the fundamentals of action research. For example, Burchell (2000) highlights action research studies that describe the greater potential for 'insider' research to bring about change than 'outsiders' unknown or ignored by those in practice. However, how 'inside' is an insider? The students, in our study, were quite happy to have their voices heard by those such as the PRA researcher (not in the School, but in the University) and the Practice Education coordinator (in their School but not assessing them on practice). It appeared that they felt less empowered when it came to voicing concerns to those with power over their assessment. They were worried about it having an adverse effect on their grades in clinical practice. Fear of reprisal was also noted elsewhere as a source of disempowerment by nursing students (Bradbury-Jones, Sambrook, & Irvine, 2007). This finding has implications for those who carry out the data collection aspect of the PRA or indeed other action research or student evaluation processes. It would seem to suggest that this aspect, if not anonymous, is best performed by a non-assessor of their work. This appears less necessary for the planning and action aspect of the process where, as Burchell (2000) highlights, the

‘insider’ can assist in bringing about change. This idea of a ‘neutral facilitator’ highlights the complex issue of power, an important dimension in action research. Esposito and Evans-Winters (2007, p. 234) maintain that action research that ‘ignores systems of power relationships and student voice sustains the teacher as knower and the student as receiver of knowledge’.

A further development of this issue of power was also present in the students’ satisfaction with the use of a group consensus approach to highlight issues. The pie chart method used with groups of students appeared to have been successful in empowering students as they, through a process of negotiation, said what they wanted and ‘the strongest person’s views could not take over’ (student quote). However, it has been highlighted that in group-based emancipatory action research, important individual views may be lost (Cohen et al., 2007). In this study, however, the value of the group consensus appeared to have outweighed this concern. Therefore, both the neutral facilitator and the group consensus appeared to have gone some way to empowering students. Glodoski (2007) argues that the process of creating an empowered environment is not a simple task and can take several years to unfold. A useful representation of this could be that empowerment and disempowerment can be conceptualised as two ends of a continuum (Bradbury-Jones et al., (2007).

A move further up this continuum of empowerment for students was their involvement in actions. Students identified their involvement in transparent action as an important aspect of the PRA approach. Fisher and Miller (2008, p. 200), in their work with student feedback systems, also highlighted the importance of transparency of actions to students, if feedback was done in a timely manner: ‘the potential for real-time intervention means that staff can show they are responsive to students needs’. Many PRA methods focus on how to develop and involve participants in transparent actions and indeed this study could have strengthened by using additional PRA methods (Kane, 2007).

However, despite some success in both transparently acting upon student issues and giving students a stronger voice, the issue of power, as mentioned earlier, is complex. Most staff were delighted to involve students in, for example, the development of an Education Forum. Other staff, it appeared, were concerned that empowering students appeared to imply giving them complete power in either curriculum design or assessment. In contrast, one staff member in this study highlighted that action (or considered reasons for inaction) can include communication of issues to students. Communication is considered one of the core aspects of what Worrell, McGinn, Black, Holloway, and Ney (1996) describe as an ‘organisation framework of empowerment’.

Finally, if we were to move even further up this continuum of empowerment or develop a strong organisation framework of empowerment, we need to widen our actions. Ledwith (2007, p. 609) argues that emancipatory research can make a change if ‘people’s individual issues lead to local projects; local projects link with others, elsewhere, to form networks and alliances and alliances lead to movements that provide a real collective possibility for change’.

Conclusion

In summary, it appears from this and other studies that it is important to give students a stronger voice, to move them up the continuum of empowerment

(Bradbury-Jones et al., 2007). The PRA method assisted, in particular, to strengthen their group voice. It was apparent that we had some success in making actions more transparent for the students and in establishing some forums that enhanced student empowerment, such as student curriculum groups. We hope this will be the beginning of further shift in students' involvement and in the staff's views of the students' potential in this area. This study, however, used only narrow range of PRA methods. Using a broader range of PRA methods, further research needs to be carried out to strengthen the findings and revisit the action research cycle to, for example, involve more student and staff stakeholders.

We hope that this paper has served to describe and evaluate a PRA process that others could use to empower students and strengthen their voice. However, we are conscious that we, the staff and students, are at the beginning of a long process to widen the impact of these findings. In this study, we decided to use a Critical Theory emancipatory action research approach which attempts to bring about some social change. However, as Ledwith (2007, p. 608) also observed in her study: 'for this to reach the transformative potential necessary for social justice, our action has to be more strategic and collective ...'. Maybe these are our next steps.

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Notes on contributors

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