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GATES:

An online stepwise tool to
develop student teamwork
competencies

Judith Singleton & Johanna Kenyon

QUT



Allied health professionals work in teams in real world contexts

Group assignments develop:



- communication skills,
- conflict resolution skills, &
- negotiation skills

Theory &
literature
support group
assignments

Students report negative experiences





AIM:

Develop sophisticated, low-maintenance tool to improve the collaborative competencies of students engaged in group-work assignments



WHAT IS GATES?

- A platform of four sequentially released 'GATES'
- Each 'GATE' was specifically developed to integrate core teaching and learning principles within an evidence-based framework
- Modelled on TeamSTEPPS 2.0 framework for US Healthcare teams

THE GATES TOOL:



Team structure



Communication



Leadership



Situation monitoring &
Mutual support

Assignment submission



METHODS

Participant Recruitment



5 Allied Health courses



Total Student Cohort = 693



Email sent out to all students enrolled in these units inviting them to participate - PIC forms attached to email

METHODS

Anonymous online questionnaire - Key Survey

Beginning of semester



Students: $n = 187$ (26.98% response rate)



Academics: $n = 5$



End of semester



Students: $n = 102$ (14.72% response rate)

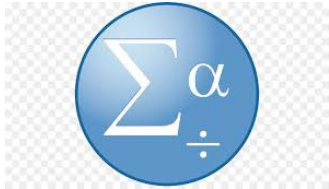


Academics: $n = 5$

MIXED METHODS

Data Analysis

Quantitative data



IBM SPSS Version 25

Qualitative data



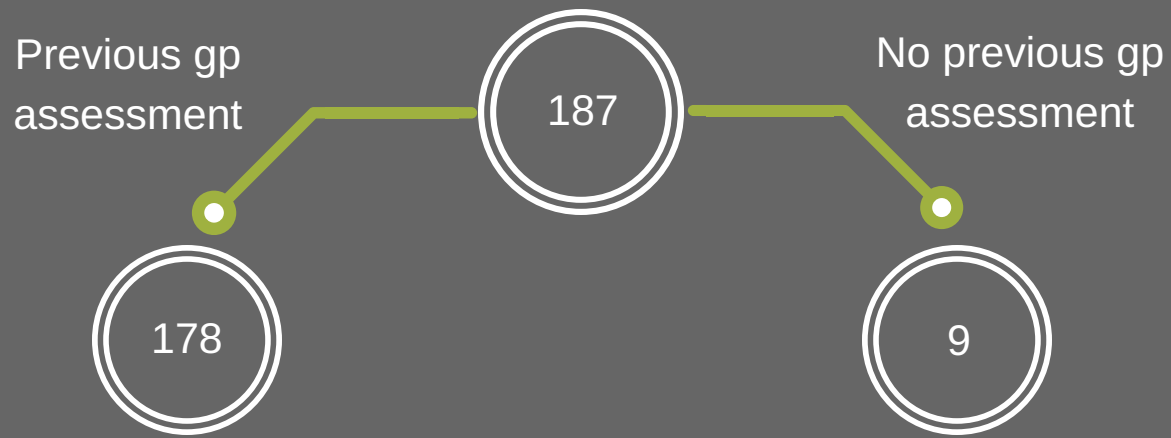
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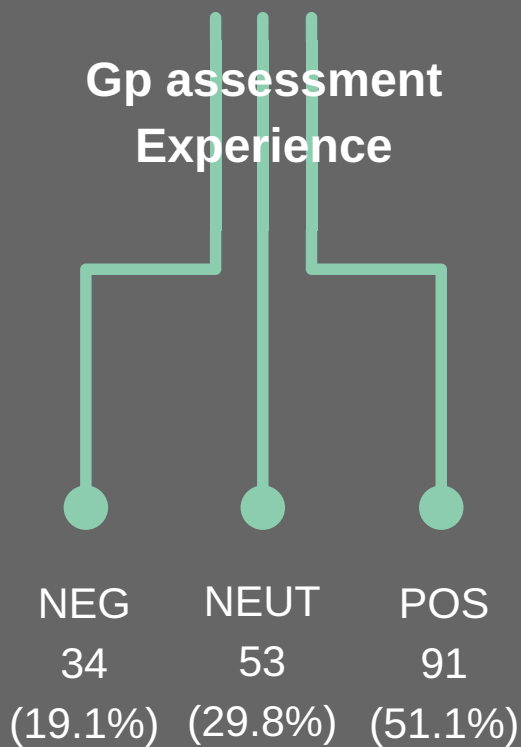
Manual coding



RESULTS:
Phase I:
Beginning Of
Semester:
Students



Gp assessment
Experience



Experience impacted by
behaviour of gp members



Higher proportion (67.65%) students who reported neg. experience with gp assessments vs 13.33% of students of reported pos. experience with gp assessments do not believe gp assessments are fair & effective means of assessing knowledge

$$(\lambda_4^2 = 40.544, p < 0.001)$$



A higher proportion of students (32.08%) who reported previous group assessment tasks as positive experiences agreed that the group assessment task process would be easier if resources to support team competencies were provided compared with students who reported negative experiences (5.35%) with previous group assessment tasks

$$(\lambda_4^2 = 17.053, p = 0.002).$$

CALD vs NON-CALD STUDENTS



A greater proportion of CALD students (60.42%) compared with 47.69% of non-CALD students reported a positive experience with gp assessments

$$(\chi^2_3 = 13.731, p = 0.022)$$



A higher proportion of CALD students (48.94%) compared with non-CALD students (21.71%) also believed that group assessment tasks were an effective and fair means of assessing their knowledge compared with the non-CALD students

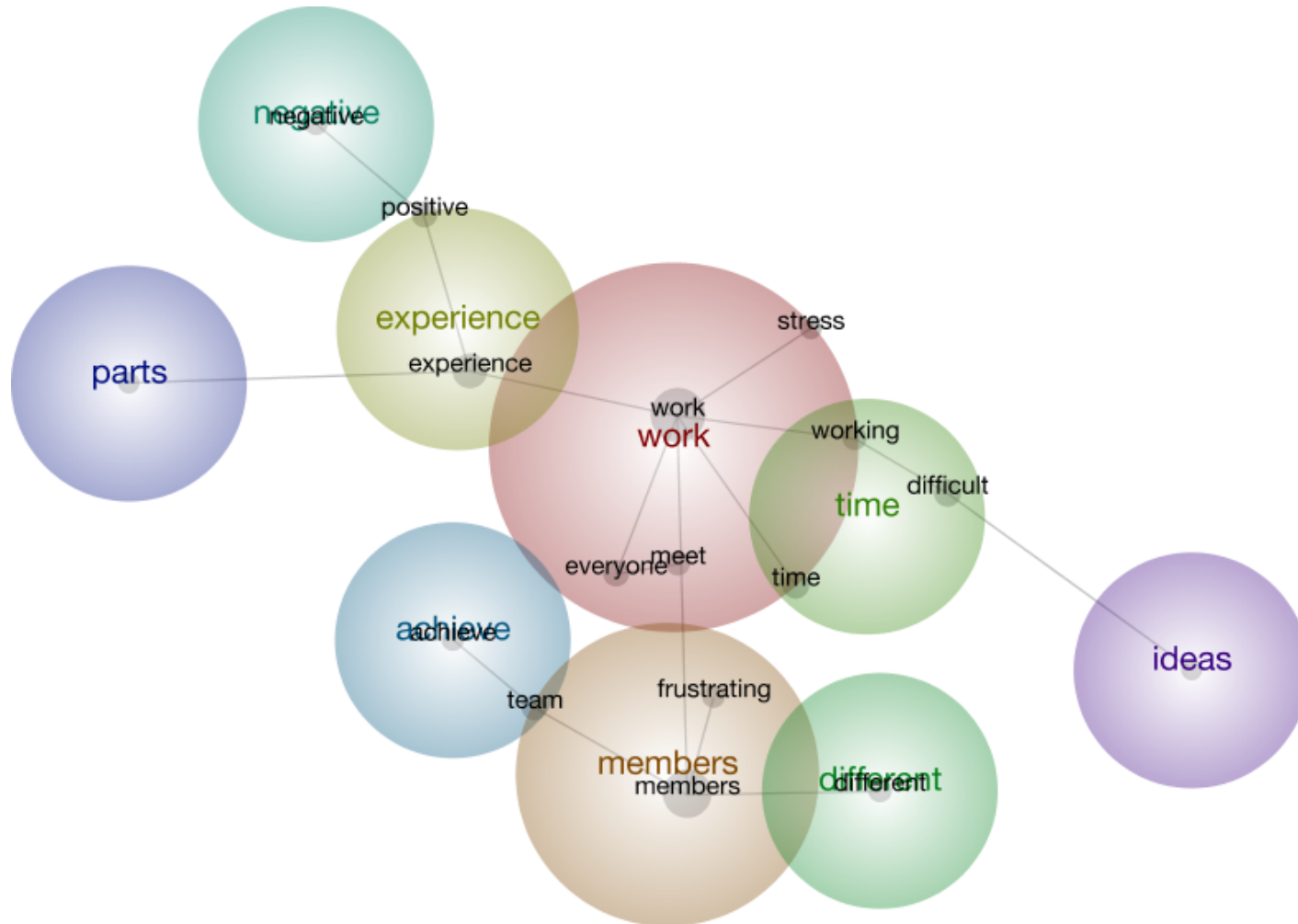
$$(\chi^2_2 = 9.637, p = 0.001)$$



A significantly higher proportion of CALD students (72.34%) supportive of resources being available to support team competencies and help students manage team issues if they arose compared with non-CALD students (51.94%) .

$$(\chi^2_2 = 8.722, p = 0.013)$$

Student Experiences with Group Assessments



“Had a team member from hell who ended up being removed from the group due to her behaviour and inability to work with anyone.” [SP12]

“Lack of effort from certain team members, resulting in them receiving grades they don't deserve and increasing stress on other members.” [SP19]



RESULTS:

Phase I:

Beginning Of

Semester

Academics

Academics (n = 5)



All 5 had used gp assessments before



- All 5 had experienced team issues with students previously



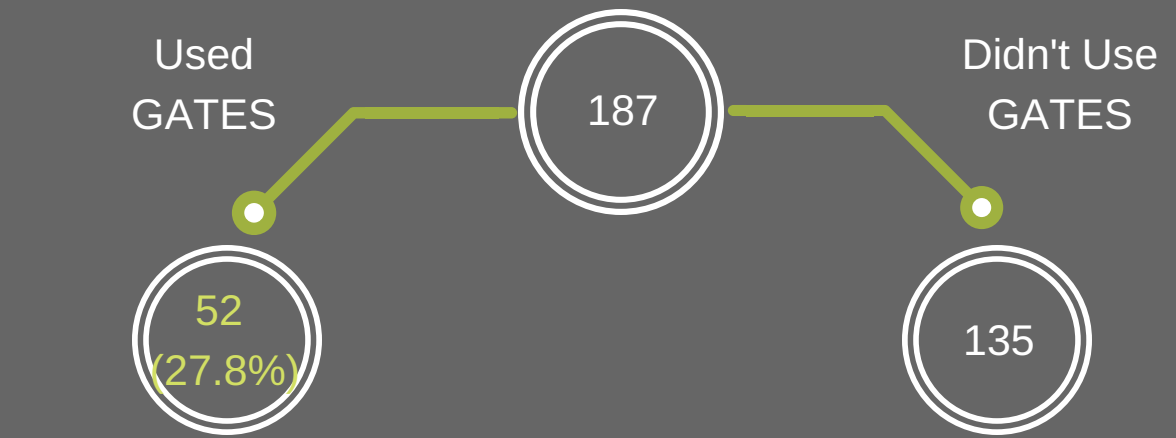
- Fighting, bullying, hitchhikers, team members going AWOL



- Two use a peer-marking tool - still doesn't eliminate problems

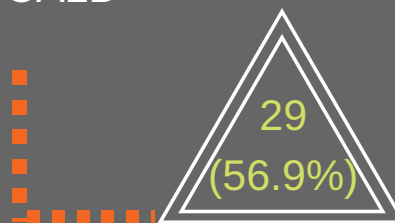


RESULTS:
Phase II:
End Of
Semester:
Students



GATES Usage
no statistically
significant difference
for

Gender CALD
 vs
 Non-
 CALD Age



Helpful for building cooperative
team environment & managing
team issues



There was no statistically significant difference between CALD and non-CALD students regarding perceptions of the helpfulness of GATES to manage team issues.



Used GATES; n=51 (data missing for 1); 38 (74.51%) reported a positive experience with the semester's group assessment task and of these 38 students, 27 (71.05%) found GATES helpful in facilitating team work.

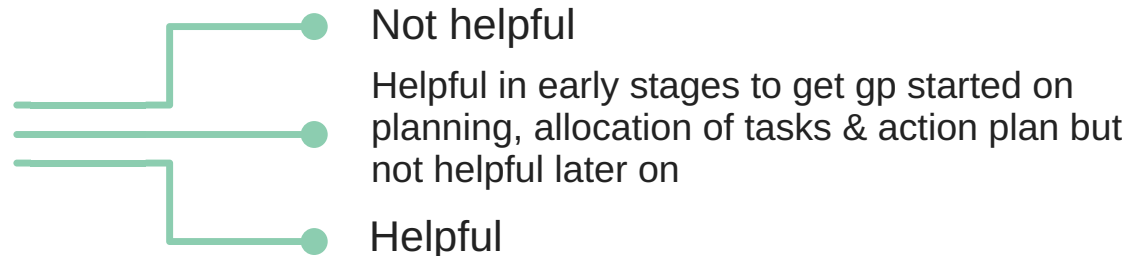
Student Experiences with Gp Assessment



Similar negative & positive themes to previous experiences



Helpfulness of GATES





RESULTS:
Phase II
End Of
Semester
Academics



‘There were a couple of groups who said they had hitchhikers but I don't think they used the GATES tool to help. Most of the groups appear to have had no problems.’ [AP2]



‘I think the GATES tool got the students working on the group assignment faster than in previous years (I have run this assessment task for the last three years here at QUT)’ [AP4]




“I think GATES provided structure for students to start their work together. Some groups used it and others did not. Overall, I think GATES was positive.” [AP3]




“The GATES tool has been incredibly helpful in facilitating successful group assignments in this unit. Anecdotal feedback from students has suggested that they appreciated this tool to help provide a clear framework for each group member/group, and the resulting assignments were of a high quality.” [AP5]


DISCUSSION & FUTURE DIRECTIONS



Assessment item needs to be embedded/integrated with GATES so working through GATES not seen as 'extra' thing to do



Build in calendars, time lines & remove wiki to improve student resources in GATES 1 & 2



GATE 4: Add resources such as videos on conflict resolution & how to have those difficult conversations with team members + more resources on negotiation skills



Course coordinator has to be on board & encouraging use of GATES



Thank you!
Questions?

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