

Valuing, measuring and tracking the development of learning dispositions within a K-12 School.

 $\ensuremath{\mathbb{C}}$ The Association of Independent Schools of NSW 2021

1

School: Roseville College

Project Leader: Amy Van Arkkels

Project Team Members:

Tessa Crane, Jos Dudley, Karen Falconer, Nicola Hoffman, Natalie Jeffrey, David Johnson, Malyn Mawby, Penny Munro, Jane Sloane, Amy Stannard, Abi Woldhuis, Glenn Wykes.

Mentor/Critical Friend/s: Dr Kimberley Pressick-Kilborn

Contents

Executive Summary	6
Literature Review	7
Aim and Research Questions	9
Methodology	10
Results and Discussion	18
Limitations	33
Conclusion	35
Acknowledgement	36
References	37
Appendixes	38
Roseville College Research Team	60

List of Figures

Figure 1-Roseville College Top 5 Learning Dispositions
Figure 2- Survey participation of students and parents by year group19
Figure 3-Item from online survey22
Figure 4-Diagrams showing Learning Disposition results22
Figure 5-Graphical summaries of 3 rounds of data collection for both year groups (normalised data)
Figure 6-Year 11 2020 Summary of 3 rounds (normalised data)25
Figure 7-Year 6 2020 Summary of 3 rounds (normalised data)26
Figure 8-Summary of learning dispositions value rating (normalised)

Executive Summary

The Roseville College research project explores the learning dispositions most valued by students, teachers and parents. Its focus was aligned to the school's Strategic Direction 2018-2020, to equip each girl with a progressive, robust attitude to learning through responsibility, challenge and curiosity. The ultimate goal of the project was to develop a school wide measure to assess the learning dispositions valued by the Roseville College community. It was hoped that this measure could be used by students across Junior and Secondary years to facilitate the development of learning dispositions from an early age. The research team was also interested in understanding how these learning dispositions might change over time. A multi-stage, mixed methods approach to the research was devised, and surveys, online tools and focus group interviews were utilized to gather data from two cohorts over a fifteen month period. The evidence gathered built a deeper understanding of the identified dispositions most valued within the College community, and the advantages and disadvantages of students actively engaging with their own data.

Literature Review

At Roseville College, our Strategic Direction 2018-2020 (Roseville College, 2017) clearly articulated our vision to equip each girl with a progressive, robust attitude to learning through responsibility, challenge and curiosity. The challenge, however, was in how we operationalise the learning dispositions required for success, in school and beyond, and how we ensure that these dispositions are valued, measured and delivered.

Educational institutions recognise that the purpose of an education extends beyond the acquisition of knowledge. The OECD (2018) suggest that students also need a broad range of skills including critical and creative thinking, self-regulation, collaboration as well as empathy and self-efficacy. Additionally, when moving into the workforce, it is expected that problem solving, interpersonal and communication skills will become more important than ever before and individuals will be required to continually learn, updating their skills and knowledge in a rapidly evolving working environment (Foundation for Young Australians, 2017).

Tertiary institutions, including the University of Sydney, have commenced the development of measures which will assess and track the growth of 'graduate qualities'. These qualities, which extend beyond content knowledge, include influence, interdisciplinary effectiveness, cultural competence, integrity and resilience. (University of Sydney, 2016). Similarly, at the University of Technology Sydney, Thompson (2016) developed web-based software to facilitate student self-assessment of important 'attributes' including group work, respect for others, curiosity, innovative thinking and versatility. For both tertiary institutions, it is clear that 'the relevance of attributes beyond handwriting and memorizing standard answers needs to be made explicit throughout their curriculum' (Thompson, 2016, p. 210).

In a secondary education environment, Nagy (2016) developed a system for tracking students' 'effort indicators' which include, engagement, persistence and diligence. Using a rubric designed in consultation with staff and students, each student was assessed for their effort indicators, and students self-assessed their learning dispositions against a rubric. Data visualisations, presented to students, facilitated targeted student-led coaching conversations which informed goals set for the following term. Through focusing on the

measurement and tracking of effort, rather than academic results, Nagy (2017) suggested that the school's success focus intentionally shifted towards the development of essential learning dispositions. Despite the reported positive results of this project, Nagy warned that 'effort tracking could be used counter-productively as just another summative assessment of student performance, merely increasing the pressure on students' (2016, p.187). As such, it is paramount that schools are ethical in the development of any visual data analytics tool intended for student use, and pay particular attention to any unintended effects on student learning or wellbeing.

In summary, within a rapidly evolving educational and workplace context, a focus on the development of skills necessary for success is appropriate. As such, tertiary and secondary institutions have turned their attention to the qualities, attributes or indicators valued with the respective institution, and how these might be developed, measured and valued. The broad aim of this project was to devise a school wide measure to assess the learning dispositions valued by the Roseville College community. It was our intention that this measure could be used by students across Junior and Secondary to facilitate the development of valued learning dispositions from an early age.

Aim and Research Questions

Aim

The broad aim of this project was to devise a school wide measure to assess the learning dispositions valued by the Roseville College community. It was our intention that this measure could be used by students across Junior and Secondary to facilitate the development of valued learning dispositions from an early age.

Research Questions

- 1. Which learning dispositions are most valued by students, teachers and parents?
- 2. In what ways, if at all, do students' dispositions for learning change over time?
- 3. What are the advantages and disadvantages of students actively engaging with their own learning dispositions data?

Methodology

Participants and Recruitment

The participants of this research were the 2019 Years 5 and 10 cohorts, approximately 155 students. In line with the aim of the research project, it was necessary to choose year groups from both the Junior and Secondary schools. The year groups were involved in the research over a two year period.

In line with the AIS Ethical Guidelines, the privacy and confidentiality of all participants are protected. All students involved in this project, and their parents, were provided with an information form which outlined the purpose of the study (*Appendix 1 – Learning Disposition Surveys – Staff, Students, Parents*). Students who volunteered for the Focus Group Interviews provided additional consent, indicated within the form, and it was clearly outlined the students' right to withdraw from the Focus Group at any time.

It was noted within the Information and Consent form that students may feel slightly uncomfortable during the online self-assessment activity and during the focus group when answering questions about their own learning dispositions. Students were assured that their ideas would not be reported in a way that identified them to others. This was emphasised with students participating in the Focus Groups, both before and after the discussions. Students were also given the option to leave the focus group at any time or to not engage with questions asked during the discussion. Students were provided with the options to speak with College counsellors, Pastoral Care teachers or classroom teachers if they became upset during or after a Focus Group.

Research Design and Procedure.

To address the research questions, a multi-stage, longitudinal mixed-methods study was designed. The three stages are outlined below.

Stage One – Roseville College Learning Dispositions

(September 2018 – March 2019)

The focus for the first stage of the research project was the development of the Roseville College Learning Dispositions. The research team reviewed the literature on learning dispositions required for students' success in school, tertiary study and work. From this, a survey (*Appendix 1 – Learning Disposition Surveys – Staff, Students, Parents*) was developed by the research team to ascertain the learning dispositions most valued by all key stakeholders, students, teachers and parents. This was distributed to students and parents from Year 5 -12, as well as all College staff, at the end of Term 4, 2018.

Using the results of this survey and the literature review, the team facilitated staff and student focus groups to operationalise the learning dispositions deemed essential for future success and valued by the Roseville College community. Beginning in January, 2019 at a Staff Professional Learning day and extending into Term 1, the research team, in consultation with staff, and student-participants in Years 5 and 10, and our academic mentor, defined and operationalized each of the five learning dispositions, creating a number of items (*Appendix 3. Learning Dispositions – Online Student Survey Questions*) which would be included in an online assessment tool. Sample questions items included;

Creativity

I am open to reinventing and reimagining ideas

I think broadly and boldly

Critical Thinking

I reflect thoughtfully on my decisions and choices

I respectfully question and challenge issues

Perseverance

I ask for feedback regularly, to improve my learning

I work consistently and demonstrate determination, despite challenges

Problem Solving

I am resilient and persist with problems to generate solutions

I ask questions to identify and define the problem.

Responsibility

I am independent and take ownership of my choices

I consider needs around me and do my best to contribute

By the end of Stage One, the Roseville College Learning Dispositions were defined and operationalised. An evaluation of the current best practices in data visualisation within the broader educational community, and the ways in which students may use data to inform learning, was also completed during this time.

Stage Two – Online Assessment of Learner Dispositions

(January – July, 2019)

In the second stage of the research, an online survey tool was developed for students to assess themselves against the Roseville College Learner Dispositions. This stage of the research was exploratory in nature. After requirements were agreed upon within the research team, a system for data collection, visualisation, and use was designed. A prototype was created and assessed by Stage 5 students studying IST and members of the research team. Data visualisations were presented to the project team and students to gain feedback on usability and ease of engagement. Feedback from the prototyping sessions was utilised to refine and complete the online tool by the beginning of Term 3, 2019.

Once developed, the tool was used by the student-participant group, Years 5 and 10 students, for the first time in August, 2019. These same students completed the online the survey in 2020, in Term 1 (prior to campus closure and off campus learning) and finally in Term 3. This meant there was approximately 6 months between each data collection point. Students received immediate feedback on the results of this self-assessment in the form of a data visualization.

Stage Three – Student Engagement with Data

(August 2019 - September 2020)

The online survey was completed by students at three points over a twelve month period, Term 3, 2019, Term 1, 2020 and Term 3 2020. Once students had completed the survey, members of the research team conducted focus group interviews with a small group of volunteer students from the cohorts. The purpose of the interviews was to gain student insight into the lived experience of using the assessment tool and student perceptions of the value in engaging with data from a self-reported learning dispositions survey. An interview protocol was developed with the research team (*Appendix 5. Focus Group Interview Scripts*).

Data Analysis Summary

Roseville College Learner Dispositions Survey

The Learning Disposition Online Survey Tool collected quantitative data from students, teachers and parents. A descriptive statistical analysis of quantitative data revealed trends in responses.

Roseville College Learner Dispositions – Online Assessment Tool

This measure was developed through the research project and collected quantitative data. Students self-assessed their learner dispositions three times over a twelve month period. Descriptive statistical analysis of the quantitative data was completed.

Focus Group Interviews

The research team conducted interviews with a sample of students throughout the twelvemonth data collection period. The purpose of the interviews was to gain student insight into the lived experience of using the assessment tool and student perceptions of the value in engaging with data from a self-reported learning dispositions survey. An interview protocol was developed with the research team. Interviews were recorded, and a researcher took notes throughout the interview. Transcripts of the focus groups were created from the recordings and these were read and re- read by the research team, to capture the sense of the interview and memos noted in the margins (Creswell, 2012). The transcripts were then reviewed thematically by the research team, in alignment with research question three.

Focus Group – Interview Analysis

In 2019, a group of Year 10 and Year 5 students volunteered to join a Student Focus Group (*Appendix 4. Screenshots of Online Application*). These groups met three times throughout the research period, once they had completed the online survey tool. Students were asked about their engagement with the Learning Dispositions online survey tool, and any advantages or disadvantages in engaging with the sur vey or the subsequent personalised data.

Advantages

Students could see the advantages to engaging with their personal data on Learning Dispositions and valued the personalisation of the results. They noted that to improve as learners, you need to first understand your relative strengths and weaknesses, and as a group, in both Year 5/6 and 10/11 students could see the relationship between learning dispositions and academic achievement. It was proposed by some participants that the reinforcement of valued dispositions could provide motivation to continue developing in these areas.

Students in both cohorts also saw the value in self-reflection and goal setting as being valuable next steps once they had received their personalised spider diagram. Students noted opportunities for 'boosting' dispositions of relative weakness, reflecting a growth mindset. Students in both cohorts also noted that follow up conversations with teachers, regarding their personalised data may be helpful in their continued progress and development as learners.

Disadvantages

Throughout the interviews, it became clear that students had concerns about being judged by others. Specifically, that peers 'may think differently about me and my own self assessment' or that 'teachers may judge me and treat me differently'. Students were also concerned about 'parental expectations' if they were given access to this data. For some participants the language of the online survey tool "made me feel bad" with others raising the perception of negativity in the phrase "least like me". Students noted that the testing experience itself can impact students' beliefs about themselves, if they don't understand the wording, or the testing environment is such that they are scared to ask clarifying questions. Some students felt they had completed a number of surveys and 'this is just another one'. Questions regarding the number of times this survey should be completed were also raised.

Changes

Although the Year Group results revealed minimal changes in learning dispositions over the twelve month period, student within the focus group noted the evident changes within their personalised data visualisation.

An example is below,



Students wanted to know what they could do to improve or how to 'grow' in a weaker disposition. Additionally, students wanted more specific steps or ways they could grow in the disposition, and because this wasn't provided so didn't really know what to do next with the data in order to grow. They are taking their data and asking questions (e.g. applying it to their subjects, asking 'why?')

Students also noted a change in the way they engaged with the online tool over time. By the third data collection point, there was a reduced sense of comparison, for example, students were less inclined to 'look around' and were able to answer with more confidence

Results and Discussion

Research Question 1.

Which learning dispositions are most valued by students, teachers and parents at Roseville College?

As a learning community, it was pleasing to note the strong alignment between stakeholders, staff, students and parents, in the valuing of learning dispositions. Staff, students, and parents all identified Critical Thinking, Perseverance, and Problem-solving in their top 5 choices. Creativity was in both in terms of raw numbers and adjusted based on equal weighting across the three groups. Adjustment due to weighting also brought Responsibility in, shifting Motivation out. Motivation was rated highly by the students.

A Learning Disposition Survey (*Appendix 1 – Learning Disposition Surveys – Staff, Students, Parents*) was sent via email to all College staff, as well as students and parents from Year 5 - 12, at the end of Term 4, 2018.

	Staff	Parents	Students
n	55	230	333
votes	275	1136	1655

Each group was given equal weighting (1:3) to identify the top five (5) learning dispositions for the Roseville College community: Creativity, Critical Thinking, Perseverance, Problemsolving, and Responsibility. This finding was presented to College staff at the Professional learning day at the start of Term 1 2019.

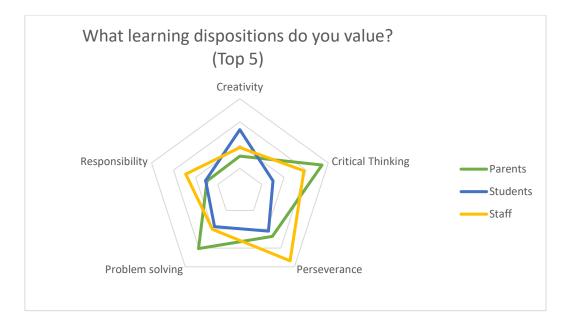


Figure 1-Roseville College Top 5 Learning Dispositions

The survey did not collect staff category, e.g. teaching, operations. As noted in Figure 1-Survey participation of students and parents by year group, all surveyed year groups were represented; parents with daughters in more than one year group was not accounted for.

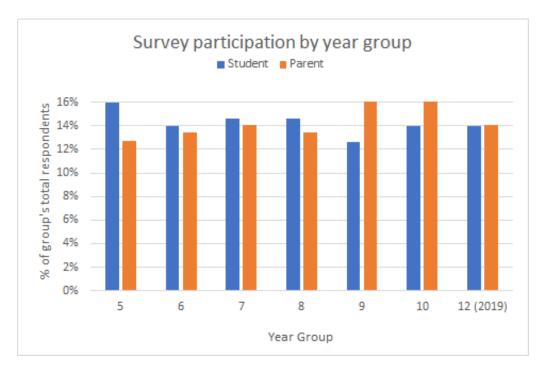


Figure 2- Survey participation of students and parents by year group

Not everyone who responded entered the requested top five (5) choices. Very few used the free-response option. The table below shows strong alignment of valued learning dispositions. Staff, students, and parents all identified **Critical Thinking, Perseverance, and Problem-solving** in their top 5 choices. **Creativity** rated in highly as per raw numbers of students who picked it. Though not in the top 5 of parents and staff, creativity had enough votes from these groups to come through when adjusted based on equal weighting. Motivation was likewise highly rated by the students. Weighting shifted it out and brought **Responsibility** in to complete the top five learning dispositions.

Learning	Summary		Detail (Raw)			Parents		Students	
Disposition	Weighted	Raw	Parents	Students	idents Staff		Years 7-12	Years 5-6	Years 7-12
n			230	333	55	46	184	105	228
LD votes			1136	1655	275	227	904	227	904
Collaboration			4						
Communicative			5						
Cooperation									
Creativity	4	4		1					
Critical Thinking	2	1	1		2				
Curiosity									
Drive to learn				4					
Motivation		5		2					
Perseverance	1	2	3	3	1				
Problem solving	3	3	2	5	=4				
Responsibility	5				3				
Risk-taking					=4				

Table 1-Summary of learning dispositions valued by the community

Research Question 2.

In what ways, if at all, do students' dispositions for learning change over time?

It was interesting to note the pattern in responses was similar across Years 5/6 and 10/11, and that Responsibility featured as the learning disposition students most strongly felt was 'most like' them. Also interesting was that perseverance equally and continuously featured as the learning disposition students felt was 'least like' them. These two findings suggest that students' dispositions for learning may not change over time, but in fact, they do.

There were three rounds of data collection, around six months apart: Term 3 2019, early Term 1 2020 (prior to campus closure and off campus learning), and Term 3 2020. Variation in participation rates over three rounds is minimal and not considered statistically significant for the purposes of this research.

Table 2-Number of students in	n each round of data collection
-------------------------------	---------------------------------

	Students (n)						
	Round 1 Round 2 Round 3						
Year 10 2019 – Year 11 2020	103	101	96				
Year 5 2019 – Year 6 2020	52	53	52				

In completing the online survey, students used a sliding scale with 'Not at all like me' on the left and 'Very much like me' on the right, for each question item on the online tool such as a sample below. The online data collection tool was not changed the entire time.

Learning Dispositions Survey

I respectfully question and challenge issues

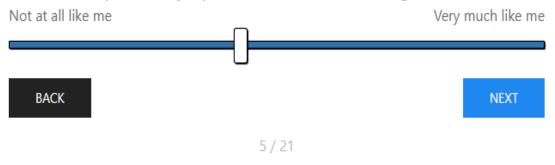


Figure 3-Item from online survey

The survey collected self-reported data. Students self-assessed each item and adjusted the sliding scale accordingly. A spider diagram summarising their responses was presented at the conclusion of each survey. More diagrams showed up as students completed the scheduled three data collection points.

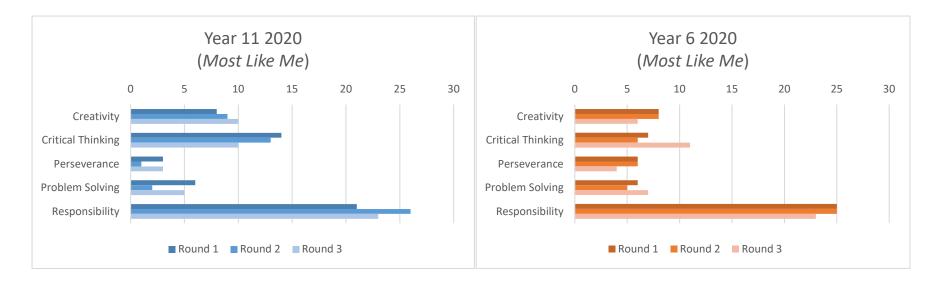
An example of what each student saw after the final data collection is below.



Figure 4-Diagrams showing Learning Disposition results

Data for each round was normalised based on ranks by each student, i.e. each student's own continuum of learning dispositions she identified with the most, least, and in between. Normalised student data was used for year group aggregation and comparative analyses.

The following summary charts show just how strongly both cohorts identified with *Responsibility*. In fact, Responsibility topped the charts, so to speak, by a significant margin, and consistently over three rounds. Ditto *Perseverance*. It consistently came out as the learning dispositions both cohorts identified with least.



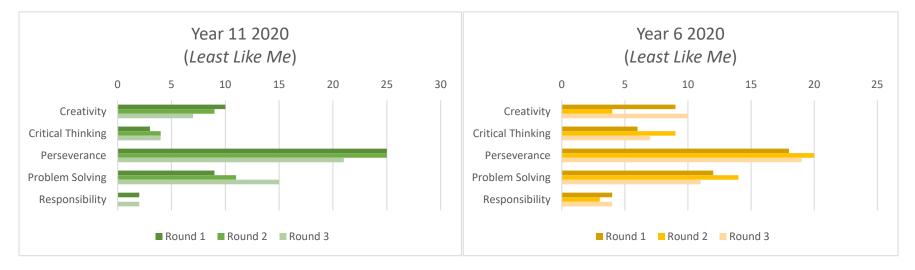


Figure 5-Graphical summaries of 3 rounds of data collection for both year groups (normalised data)

As mentioned, patterns of learning dispositions ratings for Year 10 2019/ Year 11 2020 did not change much over three rounds spanning 12 months. Responsibility maintained a significant margin over all other learning dispositions, coming in at least double the next one down, i.e. Critical Thinking. In contrast, the rest of the learning dispositions sit more tightly in rating. Critical Thinking was typically followed by Creativity and Problem-solving, in that order. Throughout the three data collection rounds, Perseverance remained the disposition students identified with the least.

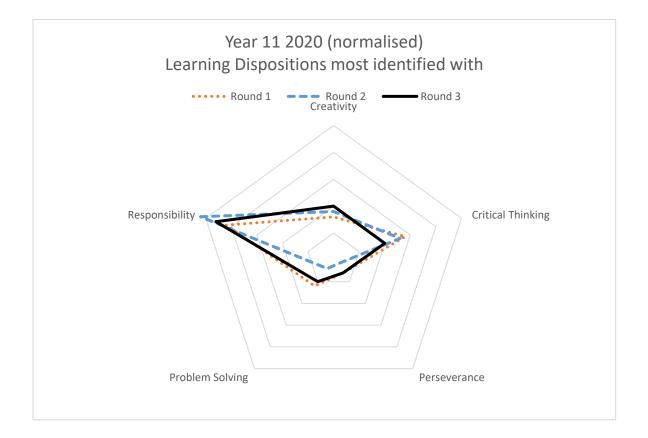


Figure 6-Year 11 2020 Summary of 3 rounds (normalised data)

Very similar patterns emerged with Year 5 2019 / Year 6 2020 results. This cohort reported that the items associated with Responsibility were most like them more than other learning dispositions. Similar to Year 11 students, these younger students self-reported the items associated with Perseverance as least like them, with Problem-Solving just above it. This pattern was the same for all three rounds except Critical Thinking which went up from third to second position in Round 3, interchanging with Creativity.

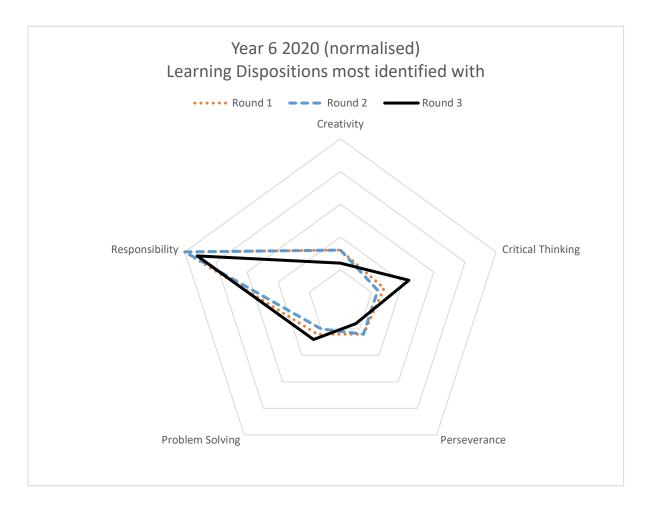


Figure 7-Year 6 2020 Summary of 3 rounds (normalised data)

Minimal variance over three rounds at aggregate level begs a more granular look for patterns at question item and student levels of detail.

Analysis at question item level also revealed few variations between the three rounds of data collection, mostly for the younger students. The following table shows multiple items for Responsibility most students identified with. In particular, "I am truthful and strive to do what is right" resonated loudly for both cohorts.

Likewise, Perseverance had several items students least identified with. Senior students firmly rated "I stay focused, work out what needs to be done first and manage my time" as an item they least identified with every single round. Junior school students showed more variation in the items they least identified with.

	2020 Y	'ear 11	2020 י	Year 6
Round	Most like me	Least like me	Most like me	Least like me
1	l form my own opinions and ideas (<i>Critical</i> <i>Thinking</i>)	I stay focused, work out what needs to be done first and manage my time (<i>Perseverance</i>)	I form my own opinions and ideas (<i>Critical</i> <i>Thinking</i>) I am truthful and strive to do what is right (<i>Responsibility</i>) I seek support and collaborate with others (<i>Responsibility</i>)	I ask questions to identify and define the problem (<i>Problem</i> - <i>Solving</i>)
2	I form my own opinions and ideas (<i>Critical</i> <i>Thinking</i>) I am truthful and strive to do what is right (<i>Responsibility</i>)	I stay focused, work out what needs to be done first and manage my time (<i>Perseverance</i>)	I am truthful and strive to do what is right (<i>Responsibility</i>)	I embrace setbacks as an opportunity to stop, reflect and make changes (<i>Perseverance</i>)
3	I am truthful and strive to do what is right (<i>Responsibility</i>)	I stay focused, work out what needs to be done first and manage my time (<i>Perseverance</i>)	I form my own opinions and ideas (<i>Critical</i> <i>Thinking</i>)	I ask for feedback regularly, to improve my learning (<i>Perseverance</i>)

Table 3-Most common question items students identified with most, and least

Results at aggregate levels may suggest students did not really have any variances in their learning dispositions over time. A few indicators suggest otherwise.

Behind the online tool sliding scale is a 0 to 100 scale values not visible to students (re: Figure 3-Item from online survey). Collected ratings were normalised to a scale of 10 to facilitate analysis of dispositions students most, or least, identified with, regardless of actual rating value.

Analysis at student level revealed:

- Students used the normalised full scale, 0 to 10
- There was only one instance where a student left everything at default value of 5. This only happened in Round 1.
- Around 92% of students have five distinct rankings for learning dispositions in all three rounds, followed by 7% 8% with only four.
- Of 169 students in both cohorts, 159 participated in more than one round, and 152 registered changes
 - Over half (54%) of senior students had changes in the maximum value ratings.
 Junior students registered even more with over two thirds (69%)
 - A vast majority of both cohorts registered changes in their minimum ratings
 - A significant number of students also had changes in the learning disposition they most identified with, 62% for seniors and 78% for juniors

In other words, student level analysis reveals learning dispositions change over time.

				Change in					
n		With	changes	Ma	ax value	Mi	n value	Mos	t Like Me
2020 Year 11	111	98	88%	60	54%	94	85%	69	62%
2020 Year 6	58	54	93%	40	69%	52	90%	45	78%
Grand Total	169	152		100		146		114	

Table 4-Summary of quantitative changes in learning dispositions

Research Question 3.

What are the advantages and disadvantages of students actively engaging with their own learning dispositions data?

To answer this research question, the research team looked at the data collected from the online survey tool and the student focus groups. Impact of the actual test on student self-perception, as well as survey fatigue potentially influencing research results were common threads of investigation. In both cases, engaging with their own learning dispositions data was valued. There were oscillations but generally, the sentiment was positive.

Online Survey Tool

After completing the main questionnaire, students were prompted to reflect on the value of learning dispositions data. The short reflection was optional and included a quantitative value rating, again using a sliding scale without visible numbers. Where present, ratings were normalised to a scale of 10 to facilitate analysis.

The following graph shows volatility over time with some noteworthy patterns. Most of both cohorts gave a rating of 5 or higher, averaging around 7 out of 10. Junior students tended to give higher ratings, and never gave a zero rating. The number of students opting out from doing the reflection also reduced over time.

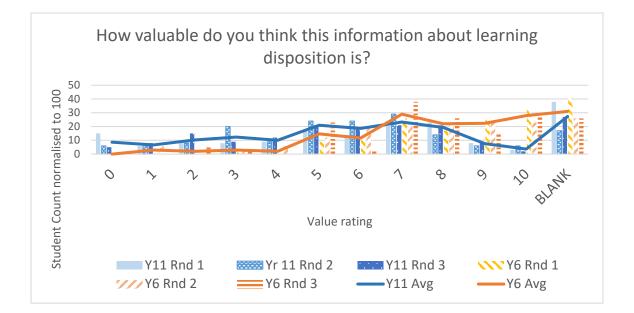


Figure 8-Summary of learning dispositions value rating (normalised)

Value ratings were volatile with many students changing perceived value of learning dispositions over the three rounds of data collection. Patterns were very similar for both cohorts. Senior students had about the same number with value rating going up (44%), as there were going down (41%). Junior students registered a stronger decline (52 %), perhaps because their value ratings tended higher than seniors in the early round. The average change in value rating is approximately four (4) for both cohorts.

	2020 Y11	2020 Y6
Rating Rise count	44%	31%
Rating Fall count	41%	52%
average change range	3.9	3.5

Student Focus Group

The research team found several common themes over the three rounds of focus group interviews with students. Perhaps not surprisingly, what some students found advantageous were seen as a disadvantage by others. Crucially, students appreciated the opportunity to reflect on who they were as learners, and implications thereof on their learning. Implications touched on academic achievement, future aspirations, as well as social dynamics.

It is fascinating that students gravitated to the strengths-weaknesses paradigm even though these were deliberately omitted in the online tool and focus group questions. The process of introspection seemed to compel students, in the focus group at least, to view low identification with certain dispositions as a weakness needing improvement, and vice versa, strong identification as a strength to nurture.

From this lens, a key advantage was self-knowledge as a catalyst for growth and agency.

"like they're your results. This is for your good not anyone else. So just to be really truthful with yourself "

"that probably like the first step to actually changing it or getting better like knowing that there's something that's going on and you can work towards it"

"I suppose I didn't know all of my weaknesses and the Learning Disposition Survey helped me to identify them and then setting goals helped me to work towards improving them, which is what my round two results showed."

In contrast, a common concern was self-knowledge affirmed self-doubts and deficits.

"sometimes I found myself picking an unreasonable answer. Let's say it was a high score for something that I'm not as good at and I found myself pressing that first to be like, "oh I wish I could do that." Like that's what I want to be able to press. That's what I aspire to, that's the grade I want to be pressing, but you know, with honest answering I didn't."

"this is where it should be but I'm not,"

"And like the wording, it's like "least like me." I know it's saying, "that's least like you and that's most like you," but it's like the wording of it, it's not really that comforting. It doesn't make you feel that good."

Common across the three rounds of interviews was the need to help make sense and act on the learning dispositions information. Students voiced this as an important conversation they could have with their pastoral care teachers, as well as academic teachers. In so doing, they would be better able to effectively use the data for self-development. In other words, engaging actively with learning dispositions data adds another dimension to the teachinglearning relationship students see as beneficial to their growth.

> "if they had someone kind of like we're doing now, that went of your results individually with you and they kind of then saw your strengths and weaknesses and made them more specific, like showed you more specific ways to enhance that, then that would be beneficial"

"I think it would be really beneficial to have teachers actually have this information so they know what to do with you."

"Like almost to hold each other accountable and to encourage one another."

However, there were also some concerned about sharing this personal information with others, including teachers, for fear of being judged harshly and wrongly.

"Somebody would just look at it and think like you're not...you're not good at that"

"you might be scared that the teachers would see it and then kind of treat you differently if they saw you needed to improve on something or they'll show up in assembly or something."

Limitations

Online assessment tool

The question items for the online learning disposition survey tool were developed by a group of teacher-researchers under the guidance of our academic mentor. In this, we acknowledge that the tool may be flawed in item construction, bias and validity in item creation.

Student Focus Group

A possible limitation of the study was the relatively small focus group size, particularly for Year 11. These groups comprised approximately 20% of the Year 5/6 cohort and less than 10% of the Year 10/11 cohort. As these groups were volunteer only, the ideas, perceptions and suggestions provided may have been effected by the willing participants.

2020 - COVID-19

The second year of data collection fell during 2020. The research team does not underestimate the effect of this schooling year, and the global pandemic, on the selfreported assessments of learning dispositions in Term 1 and Term 3 of 2020.

Directions for future research

Within the scope of this project, the data collection period was confined to a twelve month period. Tracking students over a longer period of time may yield different results as they move through different stages of development and learning.

Although students became more comfortable with the self-assessment tool throughout the study, the participants within the focus groups did note feelings of 'judgment' during initial stages of data collection. The research team have questioned how we can remove the students' perceptions of judgment or actual judgement of others during any form of self-assessment.

For the next stage of this project, we believe it would it be helpful for teachers and/or parents to be involved in the self-assessment of learning dispositions. This could take the form of coaching conversations during pastoral care time or there could be a survey for teacher and parent to complete with the comparative scores provided to all stakeholders.

Although beyond the scope of this research project, both the researchers and student participants in the focus group acknowledged that the next steps of this project would be an exploration of how these dispositions might be intentionally developed within the College curriculum and pastoral care programs. Additionally, in further developing the online tool, a "Next Steps" could be built in which outlines for students how to grow those dispositions which they have reported to be their relative weakness. Students would then be encouraged to implement those 'next steps' and reassess their effectiveness in helping to grow in particular dispositions.

Conclusion

The Roseville College research project explored the learning dispositions most valued by students, teachers and parents. Its focus was aligned to the school's Strategic Direction 2018-2020, to equip each girl with a progressive, robust attitude to learning through responsibility, challenge and curiosity. The ultimate goal of the project was to develop a school wide measure to assess the learning dispositions valued by the Roseville College community.

The evidence gathered has not only built a deeper understanding of the identified dispositions most valued within the College community, but also provided a richer understanding of the ways in which students engage with data about themselves as learners.

It is hoped that this measure can be further refined and used by students across Junior and Secondary years so that we can continue to track the development of their learning dispositions throughout their education at the College.

Research to Practice Impact

Professional Learning Group as Research Team

The Roseville College Professional Learning Group structure was pivotal to the success of this research project. Roseville College supports all staff to engage with rigorous professional learning. Every staff member is allocated to a Professional Learning Group (PLG) which meets regularly throughout the year, within the timetable. Within these groups, staff focus on an area of professional practice which they endeavour to develop within the school year. PLG Leaders coach staff as they work to achieve their goals. The research team formed one PLG throughout 2019-2020. This enabled regular meetings, within the timetable, to reduce the impact on classroom teachers and their work load. The research team were able to focus their professional goals on the development of necessary research skills, theories of learning dispositions, and student engagement with data. In so doing, the

collective professional capacity of the teachers, through the establishment and pursuit of contextualised and specific goals, that link to student learning outcomes, grew immensely.

Acknowledgement

We would like to acknowledge the support and assistance provided by the AISNSW Evidence Institute, funding support from AISNSW, and the research assistance and mentorship provided by Dr Kimberley Pressick-Kilborn. We would also like to acknowledge the valued contributions and voices of our students, and research co-creators, throughout this research project.

References

Creswell, J.W. (2012). Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research. Boston: Pearson Education.

Farrell, C.C., Marsh, J. A., Bertrand, M. (2015). Are we motivating students with data? Educational Leadership, 73(3), 16-21.

Foundation for Young Australians. (2017). The New Work Smarts. https://www.fya.org.au/wpcontent/uploads/2017/07/FYA_TheNewWorkSmarts_July2017.p df

Nagy, R. (2016). Tracking and visualizing student effort: Evolution of a practical analytics tool for staff and student engagement. Journal of Learning Analytics, 3(2), 165–193. http://dx.doi.org/10.18608/jla.2016.32.8

Nagy. R. (2017). Tracking and Visualising Student Effort: A Practical Analytics Tool for Student Engagement.

OECD. (2018). The Future of Education and Skills: Education 2030.

Roseville College. (2017). Strategic Direction 2018-2020 Realising Purpose. Retrieved:

http://www.roseville.nsw.edu.au/what-sets-us-apart/strategic-direction

Rothman, R. (2015). What data dashboards can do. Educational Leadership, 73 (3), 28-32.

Thompson, D.G. (2016). Marks should not be the focus of assessment—But how can change be achieved? Journal of Learning Analytics, 3(2), 193–212.

University of Sydney (2016). The University of Sydney 2016-20 Strategic Plan.

https://sydney.edu.au/dam/intranet/documents/strategy-and-planning/strategic-plan-2016-20.pdf

Appendixes

Appendix 1 – Learning Disposition Surveys – Staff, Students, Parents	39
Appendix 2 – Participant Information and Consent Form	42
Appendix 3. Learning Dispositions – Online Student Survey Questions	45
Appendix 4. Screenshots of Online Application	47
Appendix 5. Focus Group Interview Scripts	48
First round of Focus group interviews	48
Second round of Focus group interviews	52
Third round of Focus group interviews	56

Appendix 1 – Learning Disposition Surveys – Staff, Students, Parents

Research Project - Learning Dispositions

In Term 2, leaching staff identified a range of learning dispositions valued at Roseville College.

Learning disposition refers to the way in which learners engage in and relate to the learning process. Learning dispositions affect how students approach learning. Whilst different research identifies different dispositions, there is consensus about the importance of the learning dispositions furthering skills, engagement and deep understanding.

* Required

Learning Dispositions

Below you will find a list of learning dispositions identified by Roseville College teaching staff, research and educational literature, as most important for learners to develop.

Please choose the five learning dispositions which you believe are most important for Roseville College students to develop.

Check all that apply.
Agility
Collaboration
Communicative
Cooperation
Creativity
Critical Thinking
Curiosity
Drive to learn
Empathy
Flexibility
Focus
Independence
Inquisitive
Motivation
Persistence
Perseverance
Questioning
Responsibility
Problem solving
Risk-taking
Reflective
Other:

Research Project – Learning Dispositions

Learning disposition refers to the way in which learners engage in and relate to the learning process.

Learning dispositions affect how students approach learning.

* Required

1. Year group *

Mark only one oval.

Learning Dispositions

Below you will find a list of learning dispositions identified as most important for learners to develop.

Please choose the five learning dispositions which you believe are most important for you to develop throughout your education at Roseville College.



Research Project - Learning Dispositions

Learning disposition refers to the way in which learners engage in and relate to the learning process. Learning dispositions affect how students approach learning. Whilst different research identifies different dispositions, there is consensus about the importance of the learning dispositions furthering skills, engagement and deep understanding.

* Required

Definition

Below you will find a list of learning dispositions identified by Roseville College teaching staff, research and educational literature, as most important for learners to develop.

Please choose the five learning dispositions which you believe are most important for your daughter to develop through her education at Roseville College.

1. *

Check all that apply.

Agility
Collaboration
Communicative
Cooperation
Creativity
Critical Thinking
Curiosity
Drive to learn
Empathy
Flexibility
Focus
Independence
Inquisitive
Motivation
Persistence
Perseverance
Questioning
Responsibility
Problem solving
Risk-taking
Reflective
Other:

Appendix 2 – Participant Information and Consent Form



Valuing, measuring and tracking the development of student learning dispositions within a K-12 School UTS HREC APPROVAL NUMBER – ETH19-3570

WHO IS DOING THE RESEARCH?

This research is a collaboration between Roseville College and Dr Kimberley Pressick-Kilborn from the University of Technology Sydney.

WHAT IS THIS RESEARCH ABOUT?

This research is concerned with the dispositions or personal qualities that are needed for learning successfully in changing settings within and beyond school. The learning dispositions that have been identified as most valued by Roseville College's community are creativity, critical thinking, perseverance, problem-solving, and responsibility. These dispositions can grow and change over time and you may show or use them differently in different learning activities or subjects.

We will trial an online self-assessment of learning dispositions survey developed by Roseville College, tracking how you think your own learning dispositions are changing over a 12 month period. Additionally, we will use your feedback to refine this self-assessment survey.

WHY HAVE I BEEN ASKED?

You have been invited to participate in this study because you are either a Year 5 or Year 10 student (2019) at Roseville College, our target year groups for this study.

IF I SAY YES, WHAT WILL IT INVOLVE?

All Year 5 and 10 students will complete the online self-assessment survey of their learning dispositions, as part of normal class learning activities. This will take place three times between July 2019 and August 2020. If you agree to participate in the research, the data gathered through the survey will be used in the research but it will not be reported in a form that identifies you individually in any way.

A random sample of Years 5 and 10 students will be invited to participate in a focus group after each data collection point. If you decide to participate, you will join a group of 6-8 peers from the same grade for a 30 minute focus group discussion regarding your experiences of using the online survey.

ARE THERE ANY RISKS/INCONVENIENCE?

Yes, there are some risks/inconvenience. They are that you may feel slightly uncomfortable during the online selfassessment activity and during the focus group when answering questions about your own dispositions for learning.

You will be assured at the beginning of the focus group that the ideas that you share will not be reported in a way that identifies you to others outside of the group. When the researchers speak with focus group students before and after the discussion, the importance of not sharing what was discussed in the focus group with peers outside the group will be emphasised. In the focus group, you can choose whether or not you an swer the questions asked. If you become upset during a focus group, the researcher will suggest that you speak with your class or pastoral care teacher, year advisor or the Roseville College counsellor.

DO I HAVE TO SAY YES?

All students will complete the online self-assessment survey of their learning dispositions as part of normal selfreflective learning activities completed at the College. You may decide that you do not want your data included in the study. Participation in the focus groups is completely voluntary meaning it is completely up to you whether or not you decide to take part.

UTS CRICOS PROVIDER CODE 00099F

12.08.2019

WHAT WILL HAPPEN IF I SAY NO?

If you decide not to participate in the focus groups, it will not affect your relationship with the College, the researchers or the University of Technology Sydney. If you wish to withdraw from the study once it has started, you can do so at any time without having to give a reason or without any consequences to your studies at Roseville College, by contacting Dr Kimberley Pressick-Kilborn on +61 2 9514 5330 or kimberley.pressick-kilborn@uts.edu.au.

If you withdraw from the study once it has started, any individual documents you provide that can be re-identified as part of the research will be destroyed. The group nature of the focus group recording will make it impractical for recordings to be destroyed if you have already contributed to discussions.

CONFIDENTIALITY

By signing the consent form, you agree to the research team collecting and using the information about your learning dispositions that you have shared through the online self-assessment survey. All information will be treated confidentially. You will not be identified and any identifying information will be removed before files are stored in a password protected folder by Roseville College. Only the members of the research team, including the UTS researcher, will have access to the stored data. Your information will only be used for the purpose of this research project.

We plan to publish the results in an academic journal. In any publication, information will be provided in such a way that you cannot be identified.

WHAT IF I HAVE CONCERNS OR A COMPLAINT?

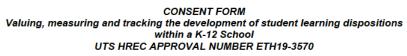
If you have concerns about the research that you think we can help you with, please feel free to contact Dr Kimberley Pressick-Kilborn on +61 2 9514 5330 or kimberley.pressick-kilborn@uts.edu.au.

You will be given a copy of this form to keep.

NOTE:

This study has been approved by the University of Technology Sydney Human Research Ethics Committee [UTS HREC]. If you have any concerns or complaints about any aspect of the conduct of this research, please contact the Ethics Secretariat on ph.: +61 2 9514 2478 or email: Research.Ethics@uts.edu.au], and quote the UTS HREC reference number. Any matter raised will be treated confidentially, investigated and you will be informed of the outcome.

12.08.2019



I agree to participate in the research project Valuing, measuring and tracking the development of student learning dispositions within a K-12 School being conducted by Dr Kimberley Pressick-Kilborn (+61 2 9514 5330 or kimberley.pressick-kilborn@uts.edu.au collaboratively with Roseville College.		
I have read the Participant Information Sheet or someone has read it to me in a language that I understand.		
I understand the purposes, procedures and risks of the research as described in the Participant Information Sheet.		
I have had an opportunity to ask questions and I am happy with the answers I have received.		
I understand that all Years 5 and 10 students will complete the Learning Dispositions self-assessment survey as part of normal learning activities. I also understand that if I choose to participate in the research, the answers that I give in this survey will be used as part of this research project.		
I freely agree to participate in this research project as described and understand that I am free to withdraw at any time without affecting my relationship with Roseville College, the researchers or the University of Technology Sydney.		
I understand that I will be given a signed copy of this document to keep.		
l agree to:		
the data gathered from my online survey being included in the research		
participating in and being audio recorded as part of a small focus group		
I agree that the research data gathered from this project may be published in a form that:		
Does not identify me in any way		
I am aware that I can contact Dr Pressick-Kilborn if I have any concerns about the research.		
Name and Signature [student participant]		
Name and Signature [parent of student participant]		
Name and Signature [researcher or delegate] Date		

Name and Signature [researcher or delegate]

۱۲C

UTS CRICOS PROVIDER CODE 00099F

Appendix 3. Learning Dispositions – Online Student Survey Questions

Creativity

I am open to reinventing and reimagining ideas

I experiment and consider feedback

I look at things from different perspectives

I think broadly and boldly

Critical Thinking

I am a broad and deep thinker, able to analyse and evaluate

I form my own opinions and ideas

I reflect thoughtfully on my decisions and choices

I respectfully question and challenge issues

Perseverance

I ask for feedback regularly, to improve my learning

I embrace setbacks as an opportunity to stop, reflect and make changes as needed

I stay focused, work out what needs to be done first and manage my time well

I work consistently and demonstrate determination, despite challenges

Problem Solving

I am resilient and persist with problems to generate solutions

I ask questions to identify and define the problem.

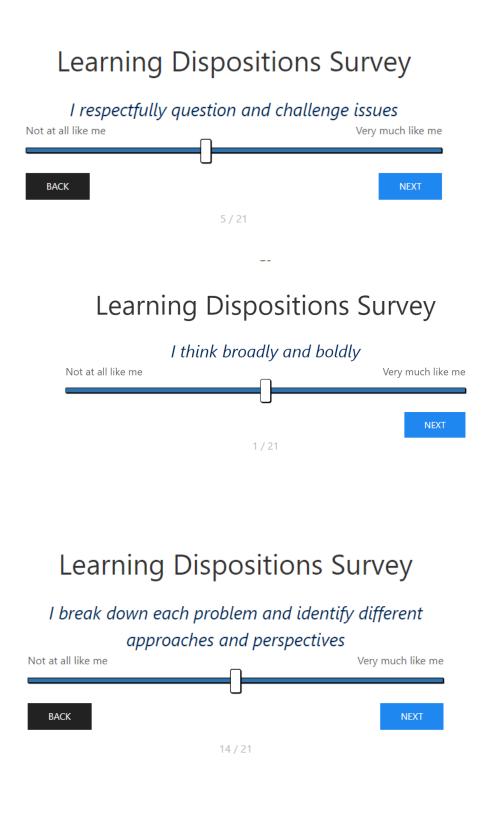
I break down each problem and identify different approaches and perspectives

I develop an initial plan, whilst being open minded to alternative strategies

Responsibility

I am independent and take ownership of my choices
I am truthful and strive to do what is right
I consider needs around me and do my best to contribute
I seek support and collaborate with others

Appendix 4. Screenshots of Online Application



Appendix 5. Focus Group Interview Scripts

First round of Focus group interviews

Introduction (3-5 minutes)

Greet and welcome everyone.

"You've responded to the learning dispositions survey and received your data. What we are interested in now is how you found the whole process."

Ground rules

- Participation in the focus group is voluntary.
- It's all right to abstain from discussing specific topics if you are not comfortable.
- All responses are valid—there are no right or wrong answers.
- Please respect the opinions of others even if you don't agree.
- Try to stay on topic; we may need to interrupt so that we can cover all the material.
- Speak as openly as you feel comfortable.
- Avoid revealing very detailed personal information
- Help protect others' privacy by not discussing details outside the group.

Survey Tool (15-20 minutes)

"We are wondering whether you could first tell us about your experience of using the survey tool."

Use Plus-Minus-Interesting (PMI)

- 1. Ask students to write their PMIs on post it notes to put onto group PMI chart
- 2. Open up conversation:

"Who would like to tell us something about what they wrote on a post it?"

Give other students the opportunity to comment/respond. OR facilitator can read one of the post-its and ask for comments on it. Be open for advantages and disadvantages.

Prompting questions for the PMI:

"What was your experience of using the survey tool itself?"

"What did/didn't you like about it?"

"What did you think about while you were completing the survey?"

"How was it valuable to you to complete the survey?"

Debrief session (10 minutes)

"Now we are going to think about the debrief session that you participated in with <teacher's name> after completing the survey."

"How did the debrief process help you in understanding your survey results?"

"Was there enough support given to you to make sense of your results?"

"What happened in the debrief session to help you to know what to do next with the information that you received in your survey results?"

"Do you have any suggestions for how the debrief session could have been improved?"

Student engagement with data (10 minutes)

After debrief and reflection

"How might you use the information to help you in the future?"

(Prompts: in your life? in your learning?)

"How important do you think the survey feedback about you as a learner is, compared with the information that's in your school reports and assessment results?"

"Are some of the learning dispositions more valuable to you than others?"

"How do you think doing this survey might help you in your learning in the future?" ("How do you think you can apply this information to help you grow or change?')

Closing (5 minutes)

"On a scale of 1-10, would you recommend other people do this survey? Why/Why not?"

"Is there anything else you'd like to tell us about your experiences of completing the survey – either the process or what you plan to do with the information the survey gave you?"

Close the meeting and thank everyone.

Gather all materials, including recording, and hand over to Malyn

Preparation

Aim to conduct focus group interviews with 6 to 8 students, and within a week of completing data collection. The plan is to have interviews transcribed externally so it is important to have the interview recorded.

- Schedule 2 teachers to conduct interview; preferably one JS and one SS
- Schedule students
- Book room
- Book A/V, or own iPad/iPod/phone
- Post-it notes and pens; same colour/s for all students

Next rounds of Focus group interviews

Introduction

Greet and welcome everyone.

"You've responded to the learning dispositions survey and received your data for <n> times.

What we are interested in now is tap into any changes between time points."

Student engagement with data

"What did you do in between completing the survey the first and second times/ second and third times?"

Prompt: 'I used to think...Now I think...'

"How much value to you is this process?"

Second round of Focus group interviews

Introduction (3-5 minutes)

Greet and welcome everyone.

"You've responded to the learning dispositions survey and received your data two times.

What we are interested in now is whether there have been any changes between when you did it last time and now."

Ground rules

- Participation in the focus group is voluntary.
- It's all right to abstain from discussing specific topics if you are not comfortable.
- All responses are valid—there are no right or wrong answers.
- Please respect the opinions of others even if you don't agree.
- Try to stay on topic; we may need to interrupt so that we can cover all the material.
- Speak as openly as you feel comfortable.
- Avoid revealing very detailed personal information
- Help protect others' privacy by not discussing details outside the group.

Reactions (5-10 minutes)

This activity calls for students to start focusing on the topic of this interview. Keep it brief.

"Think back on the recent round of completing the survey last week."

Use See-Think-Wonder

- 1. Ask students to write what they saw/thought/wondered on post-it notes
 - 2. Post-it notes need not be put up for others to see but will be collected at the end
 - 3. Open up conversation:

"Would anyone like to share what they wrote on a post-it?"

Reflections about results (5 -10 minutes)

This activity focuses on their approach and results – Round 2 results, graphs of Rounds 1 and 2.

"How did you approach completing the survey this time?"

(Prompts: How does this experience compare with when you did the survey the first time? How did it feel when you received your comparative results?)

"From your perspective, what has changed? "Why do you think it has or has not changed?"

(Prompts: What has contributed to change or hindered changed?)

Student engagement with data (15-20 minutes)

This activity focuses on interpretation and use of data, now and beyond. Spend a good amount of time here, especially the last question. We want to determine how we can support students to promote advantages and avoid disadvantages when engaging with learning dispositions data.

"Between completing the survey the first and second times, did you do anything differently with regards to your dispositions to learning? Why or Why not?"

(Possible prompts: 'I used to think...Now I think...')

"How do you think doing this survey and receiving your data might help you in your learning in the future? How might you use the information to help you in the future?"

(Prompts: in your life? in your learning? in your growth?)

"Are there any disadvantages to receiving this data?"

"Are there any advantages to receiving this data?"

"What are the next steps you would like put in place to help you?"

(Prompts – How could this be implemented? Is there anyone who can help you with this (Parents, Teachers, Friends?)? How can it be done? How often? What might you need / resources?)

Closing (5 minutes)

"Is there anything else you'd like to tell us about your experiences so far? – either the process or what you plan to do with the information the survey gave you?"

Close the meeting and thank everyone.

Gather all materials, including recording, and hand over to Malyn

Preparation

Aim to conduct focus group interviews with 6 to 8 students, and within a week of completing data collection. The plan is to have interviews transcribed externally so it is important to have the interview recorded.

- Schedule 2 teachers to conduct interview; preferably one JS and one SS
- Schedule students
- Book room
- Book A/V, or own iPad/iPod/phone
- Post-it notes and pens; same colour/s for all students

Next rounds of Focus group interviews

Would you like your teachers to have this data?

"How can we follow up with you?"

Focus group interviews will help us answer the following research questions:

- 1. In what ways, if at all, do students dispositions for learning change over time? (*new; added on 22 March 2019*)
- 2. What are the advantages and disadvantages of students actively engaging with their own learning dispositions data? (6 May 2019, replace previous question: How does an engagement with data regarding assessed learning dispositions effect students' self-efficacy for learning?)

Third round of Focus group interviews

Introduction (3-5 minutes)

Greet and welcome everyone.

"You've responded to the learning dispositions survey and received your data three times. What we are interested in now is whether there have been any changes between when you did it last time and now." should i ask about since the very first time they did it? if they can remember? (jos)

Ground rules

- Participation in the focus group is voluntary.
- It's all right to abstain from discussing specific topics if you are not comfortable.
- All responses are valid—there are no right or wrong answers.
- Please respect the opinions of others even if you don't agree.
- Try to stay on topic; we may need to interrupt so that we can cover all the material.
- Speak as openly as you feel comfortable.
- Avoid revealing very detailed personal information
- Help protect others' privacy by not discussing details outside the group.

Reactions (5-10 minutes)

This activity calls for students to start focusing on the topic of this interview. Keep it brief.

"Think back on the recent round of completing the survey earlier this week"

Use See-Think-Wonder

- 1. Ask students to write what they saw/thought/wondered on post-it notes
- 2. Post-it notes need not be put up for others to see but will be collected at the end
- 3. Open up conversation:

"Would anyone like to share what they wrote on a post-it?"

Reflections about results (5 -10 minutes)

This activity focuses on their approach and results – Round 3 results, graphs of Rounds 1, 2 & 3.

"How did you approach completing the survey this time?"

(Prompts: How does this experience compare with when you did the survey the first time? Was it different the second time? How did it feel when you received your comparative results?)

"From your perspective, what has changed? "Why do you think it has or has not changed?"

(Prompts: What has contributed to change or hindered changed?)

Student engagement with data (15-20 minutes)

This activity focuses on interpretation and use of data, now and beyond. Spend a good amount of time here, especially the last question. We want to determine how we can support students to promote advantages and avoid disadvantages when engaging with learning dispositions data.

"Between completing the survey the second and third times, did you do anything differently with regards to your dispositions to learning? Why or Why not?"

(Possible prompts: 'I used to think...Now I think...')

"Did the time in isolation/remote learning last term give you any insights into your learning dispositions?" "How do you think doing this survey and receiving your data multiple times might help you in your learning in the future? How might you use the information to help you in the future?"

(Prompts: in your life? in your learning? in your growth?)

"Are there any disadvantages to receiving this data?"

"Are there any advantages to receiving this data?"

"What are the next steps you would like put in place to help you?"

(Prompts – How could this be implemented? Is there anyone who can help you with this? Who should be involved (Parents, Teachers, Friends?)? How and how often should this be done? (what are you going to do and how often will you do it?) What do you need / resources?)

(intention is to say now that you have completed the surveys and have the data what do you think you can do with------ we want recommendations how we can move forward. We would love them to give us ideas on how the school can help them in developing/equipping dispositions. Or engage in their learning disposition development. If not engaged now how can we help them engage with the data without forcing them)

"Would you like your teachers to have this data?"

"How can we follow up with you?"

Closing (5 minutes)

"Is there anything else you'd like to tell us about your experiences? – either the process or what you plan to do with the information the survey gave you?"

Close the meeting and thank everyone.

Gather all materials, including recording, and hand over to Malyn

[Text Wrapping Break]

Preparation

Aim to conduct focus group interviews with 6 to 8 students, and within a week of completing data collection. The plan is to have interviews transcribed externally so it is important to have the interview recorded.

- Schedule 2 teachers to conduct interview; preferably one JS and one SS
- Schedule students
- Book room
- Book A/V, or own iPad/iPod/phone
- Post-it notes and pens; same colour/s for all students

Next rounds of Focus group interviews

Would you like your teachers to have this data?

"How can we follow up with you?"

Roseville College Research Team

Tessa Crane	BA DipEd MEd(Leadership)
Jos Dudley	English Teacher and Professional Learning Group Leader
	DipEd MEd(TESOL)
Karen Falconer	Kindergarten Teacher and EAL/D K-2
	BEd DipEd
Nicola Hoffman	Junior School Teacher and English & Math Lead Teacher
	Grad DipEd BA (Linguistics and Computing) Master of Applied Linguistics/TESOL
Natalie Jeffrey	Learning Enrichment Teacher – EAL/D
	BA MTeach
David Johnson	Year 12 Advisor and Learning Enrichment Teacher
	BA DipEd MA MEd (Gifted and Talented) MEd (Educational Leadership)
	Head of English
Malyn Mawby	BS Grad DipEd PostGradCert (Special Education)
	Head of Personalised Learning
Denny Munne	
Penny Munro	DipTeach BEd PostGradDip (Applied Linguistics) M (Applied Linguistics)
	Junior School Teacher

Jane Sloane	BEd (Honours) Assistant Head of Junior School – Curriculum and Wellbeing
Amy Stannard	BTch BEd C.O.G.E MEd (Leadership) Cert Theol
	Junior School Teacher and Professional Learning Group Leader
Amy Van Arkkels	BEd MEd MRes
	Director Teaching and Learning K-12
Abi Woldhuis	BEd (Special Education) DipEd GrCert TESOL MEd
	Head of Junior School
Glenn Wykes	(former) History Teacher and Professional Learning Group Leader

Dr Kimberley Pressick Kilborn

BEd (Honours) GradDipEd (EdPsych) PhD

Honorary Industry Fellow - UTS

© 2020. Unless otherwise indicated, all materials on these pages are copyrighted by the AISNSW. All rights reserved. Reproduction, modification, storage in a retrieval system or retransmission, in any form or by any means, electronic, mechanical or otherwise, for reasons other than personal use, is strictly prohibited without prior written permission.

General inquiries should be directed to AISNSW The Evidence Institute at evidence@aisnsw.edu.au