Research/Professional Learning Project - Online Religious Education (RE) Assessment

> *Well, we know where we're goin'*
> *But we don't know where we've been*
> *And we know what we're knowin'*
> *But we can't say what we've seen*
>
> *We're on a ride to nowhere*
> *Come on inside*
> *Takin' that ride to nowhere*
> *We'll take that ride*

from *Road To Nowhere* (*Talking Heads* - David Byrne)

Mike's been thinking – the fifth in a series of articles outlining our research/learning project

In my fourth article (2 July 2015) I looked at Professor John Hattie's June 2015 research papers:

- What Doesn't Work in Education: THE POLITICS OF DISTRACTION[1], and
- What Works Best in Education: THE POLITICS OF COLLABORATIVE EXPERTISE[2]

I wondered, in the light of Hattie's research, are we asking the right questions with our research/professional learning project?

I came to the conclusion that, in my view, we are at least asking the right questions; questions that Professor Hattie's research would suggest are key questions for student achievement. By way of a reminder, here is a selection of four quotations from Professor Hattie's research that provide a sense of how I reached my conclusion:

> The major purpose of assessment in schools, however, should be to provide interpretative information to teachers and school leaders about their impact so that they have the best information possible about where to go next in the teaching process.[3]

> Until we see tests as aids to enhance teaching and learning and not primarily as thermometers of how much a student knows now, on this day, on this test, then developing more tests will add little and will remain an expensive distraction.[4]

> Teachers are asked to account for their 'overall teacher judgements' in the major domains – if they rely solely on tests, they fail; if they use no tests they fail – they must defend their day-to-day judgements about the interpretation of the meaning and consequences of evidence from multiple sources.[5]

> We need to understand teacher and student expectations, to ensure they are appropriately high – and then to provide teachers with decent assessment and evaluation tools to help them set and evaluate these expectations.[6]

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[1] http://visible-learning.org/2015/06/download-john-hattie-politics-distraction/
[2] https://www.pearson.com/hattie/solutions.html
[3] http://visible-learning.org/2015/06/download-john-hattie-politics-distraction/ (p.16)
[4] Ibid (p.16)
[5] https://www.pearson.com/hattie/solutions.htm (p.8)
[6] Ibid (p.13)

(1) So what has Mike been thinking now?

I have been reading the recently released Education Review Office's (ERO) trial document, *School Evaluation Indicators 2015*: *Effective Practice for Improvement and Learner Success*[7] and my thoughts turned once again to our research/professional learning project regarding online RE assessment for Year 4 students.

Features of ERO's approach in their current trial evaluation document include:

- an integrated approach to external evaluation and internal evaluation
- a participatory/collaborative approach to the evaluation process
- a context specific approach to evaluation design, the gathering, analysis and synthesis of data and the communication of findings
- an emphasis on evaluation as a learning process, building knowledge at school and system level.[8]

Again, I wondered, are we asking the right questions with our research/professional learning project?

I say this because we might be asking the right questions but the particular track we have chosen to go down in our attempt to answer our questions might end up being the wrong track.

That said, it's always better to be asking the right questions rather than asking the wrong questions!

(2) How did Mike seek to answer his question? … i.e. *are we asking the right questions with our research/professional learning project*?

As I read the trial school evaluation document from ERO, much of its approach resonated with the aim of our online RE assessment research/professional learning project.

The trial school evaluation document from ERO identifies six domains that current research and evaluation findings show have a significant influence on school effectiveness and improvement. The principles that have guided the design of ERO's indicators framework and the selection of indicators include these three important principles:

- they signal a shift to an evaluation orientation that requires deep professional expertise and engagement;
- they are observable or measurable;
- they require rich data from a range of sources for effective decision making.

By way of evidence that might support my statement that "much of its [ERO's] approach resonated with the aim of our online RE assessment research/professional learning project", I offer the following excerpts from our first four process summary articles (3rd June 2014, 24th March 2015, 3rd June 2015 and 2nd July 2015) and compare them with excerpts from the trial school evaluation document from ERO:

> Assessment activities are inclusive, authentic and fit-for-purpose, providing relevant and meaningful evidence to evaluate the student's achievement and progress and develop next steps.[9]

> Leaders and teachers are data literate: posing focused questions; using relevant data; clarifying purpose(s); recognising sound and unsound evidence; developing knowledge about statistical and measurement concepts; making interpretation paramount; and having evidence-informed conversations[10]

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[7] http://www.ero.govt.nz/Review-Process/Frameworks-and-Evaluation-Indicators-for-ERO-Reviews/School-Evaluation-Indicators-2015-Trial

[8] Ibid (p.10)

[9] Ibid (p.36)

[10] Ibid (p.41)

"Please remember, the vision for our online RE assessment research/professional learning project is:

> To develop a bank of valid and reliable student-centred questions & use online RE assessment to provide teachers with objective data to:
>
> - check their students' understanding, learning and knowledge of the learning outcomes in our national RE curriculum;
> - reflect on, and respond to, the effectiveness of their individual and collective teaching practices; and
> - set meaningful individual, class and whole-school RE targets to make learning more effective for students."

Goals and priorities are based on high quality data and valid information about student achievement and professional practice. The generation of solutions and decision-making about improvement strategies are underpinned by evidence related to what will make the most difference for learners.[11]

Leadership uses a range of evidence from evaluation, inquiry and knowledge building activities to develop, implement, monitor and modify strategies for improvement.[12]

"We trust this research/learning project will enable us to better *know where we've been* and to be in a data-based position *to say what we've seen*. In this way we, as individual schools and as a system of Catholic schools, will be able to use the assessment data the project will provide to

- more accurately describe and *know what we're known'*;
- reflect upon how we might better plan for systemic as well as individually targeted professional development and RE learning support for teachers;
- reflect upon individual and school-wide teaching practices that might further improve RE learning outcomes for our students."

The quality of teaching is a strong determinant of outcomes for diverse students. What teachers know and do is one of the most important influences on what students learn. Over three years, learning with a high performing teacher rather than a low performing teacher can make a 53-percentile difference for two students who start at the same achievement level.[13]

"Our next steps will be to gather groups of teachers across the Diocese together to begin the challenging, yet hopefully the most professionally enriching aspect of the project, task of writing around 150 – 200 multiple choice questions that cover the mandated *Religious Education Programme for Catholic Primary Schools in Aotearoa New Zealand* (NZ Catholic Bishops' Conference, 1997)."

Appropriate tools and methods are used to gather, store and retrieve a range of valid and reliable data.[14]

"The purpose of this first run through of the actual process is two-fold:

1. To discover all the technical "problems" that might arise when we conduct the online assessment for all Year 4 students simultaneously throughout the Diocese.

2. To provide us with an opportunity to test the integrity, reliability and validity of the initial set of questions we have developed.

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[11] Ibid (p.23)
[12] Ibid (P.25)
[13] Ibid (P.34)
[14] Ibid (P.41)

So our initial trial will be as much about the technicalities of the process as it will be about having our first glimpse of being in a position to better *know where we've been* and to have an initial foretaste of being in a data-based position *to say what we've seen*."

The analysis of discrepant data and information from the teacher's own setting creates cognitive dissonance and acts as a catalyst for challenging expectations and deficit theorising and rethinking existing practices. The professional community engages in systematic, collaborative cycles of inquiry and learning that involve: purposeful gathering and interrogation of a range of data and information.[15]

The professional community gathers, analyses and uses evidence of student learning and outcomes to improve individual and collective professional practice.[16]

The New Zealand Curriculum and *Te Marautanga o Aotearoa* emphasise teaching as a process of inquiry, and the importance of professional leaders and teachers having the expertise to inquire into practice, evaluate its impact on student outcomes and build organisational and system knowledge about what works.[17]

Relational trust at all levels of the learning community supports collaboration and risk taking, and openness to change and improvement.[18]

The professional community seeks evidence about the effectiveness of learning processes and outcomes.[19]

"Ultimately, when this process has matured in a number of years, we, as individual schools and as clusters of Catholic schools, aim to be in a position to use the assessment data the project will (hopefully) provide to

- more accurately describe and *know what we're known'*;
- reflect upon how we might better plan for systemic as well as individually targeted professional development and RE learning support for teachers;
- reflect upon individual and school-wide teaching practices that might further improve RE learning outcomes for our students."

(3) So, *are we asking the right questions with our research/professional learning project*?
My view is, yes, we are at least asking the right questions; questions that the trial school evaluation document from ERO would suggest are important questions for influencing school effectiveness and student outcomes in RE.

Perhaps others may have a different view? And that is understandable as evidence for policy-making and educational interventions is "not always clear-cut and is often the subject of vigorous debate – which is healthy, but it doesn't make it easier to reach conclusions."[20]

(4) Where are we at now?
On Tuesday 8 September 2105, we completed our first ever online RE assessment whereby 537 students successfully logged on and completed the 40 question assessment ☺ … the process worked technically ☺ … and any wee technical hiccups were promptly sorted by Patrick Nisbet and Clair Stanelos ☺ ☺

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[15] Ibid (P.37)

[16] Ibid (P.38)

[17] Ibid (P.40)

[18] Ibid (P.41)

[19] Ibid (P.39)

[20] Barber, M. http://visible-learning.org/2015/06/download-john-hattie-politics-distraction/ (Foreword)

**(5) What did your feedback on our first run through the process tell us?**

Thanks ever so much to the Year 4 teachers and Directors of Religious Studies (DRS) who provided us with your feedback ☺

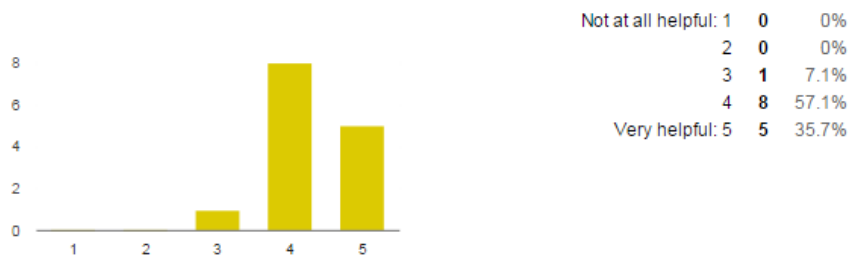Here's a summary of your feedback:

My role is:

Year 4 Teacher	10	66.7%
DRS	6	40%

Did your Year 4 students find the online multiple choice question process easy to participate in?

Too difficult: 1	0	0%
2	1	6.7%
3	2	13.3%
4	7	46.7%
Easy (i.e. no difficulty at all): 5	5	33.3%
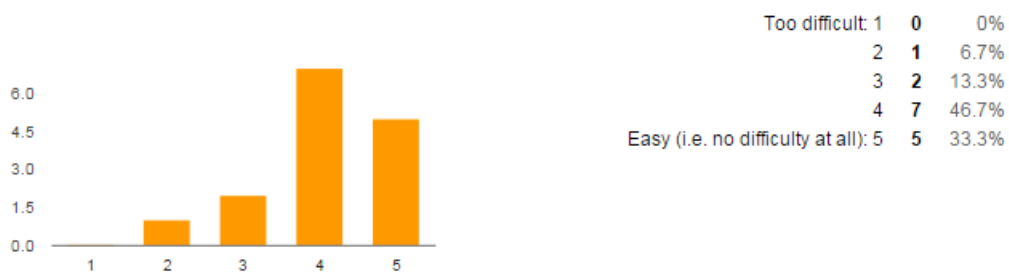
Did you as a Year 4 teacher find the Teachers' User Guide helpful as pre-reading?

Not at all helpful: 1	0	0%
2	0	0%
3	1	7.1%
4	8	57.1%
Very helpful: 5	5	35.7%

Did you as a Year 4 teacher find the lead up emails from Mike explaining the system and process helpful?
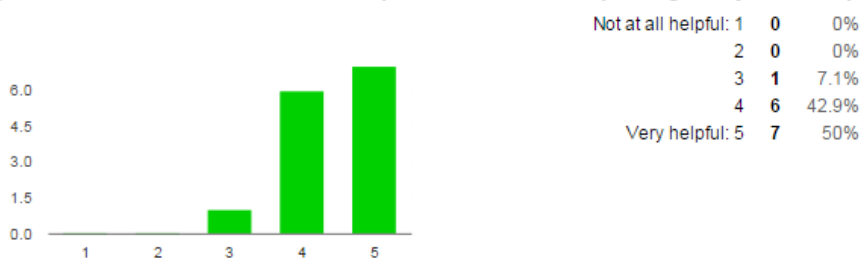
Not at all helpful: 1	0	0%
2	0	0%
3	1	7.1%
4	6	42.9%
Very helpful: 5	7	50%

Did you show the preview email demonstrating how to use the system to your Year 4 students?

Yes	9	60%
No	6	40%

If you did you show the preview email demonstrating how to use the system to your Year 4 students, did they find it helpful?

Not at all helpful: 1	1	10%
2	0	0%
3	1	10%
4	4	40%
Very helpful: 5	4	40%
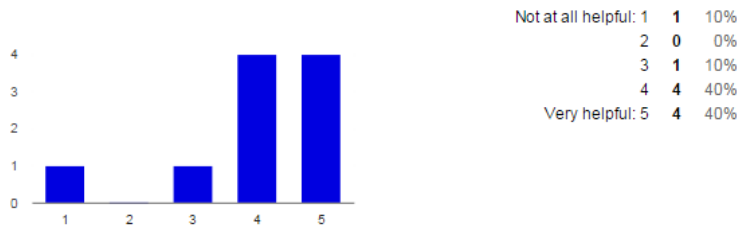
Which devices did your Year 4 students primarily use to access and complete the online RE assessment

Chromebooks	7	46.7%
iPads	4	26.7%
Laptops	8	53.3%
Desktop Computers	2	13.3%
Mobile Phones	1	6.7%
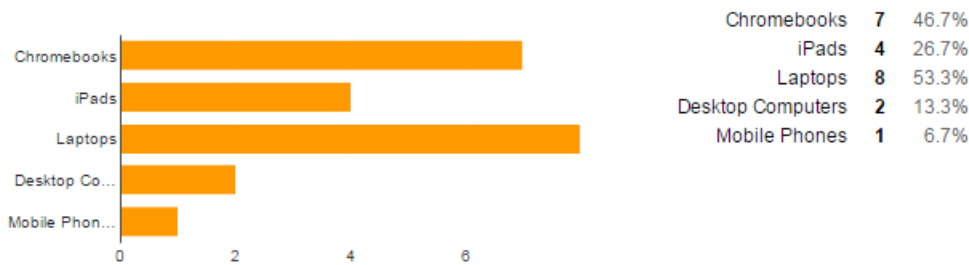
And the following responses summarise the trends in the **Tell us anything else you would like us to know** feedback question:

- We were very well organised and this helped a lot. Having the practise day was invaluable. I found I needed to use some of the other Year 4 students who had finished to read the questions to 3 of my students - this still worked well and the students didn't feel bad!!!! When we get the data this will really help our teaching. Thanks for all your hard work in setting it up

- We had one 'hiccup' with a question being wrong but it was successfully resolved with a phone call to Patrick who talked us through the solution.

- Having a practice day was great. The students liked having a chance to log in and so on the real day they concentrated on the questions because they were skillful at logging on. Only complicated bit was the website address.

- Really good to have had a practice run. Made it so easy on the day. Children confidently logged in using passwords the second time and it was so quick. Due to the number of devices, the class was split in half with half leaving the room with another teacher. This worked well. Thanks for all your hard work on this. Am sure it's going to be great.

- Extremely user friendly system, the whole thing ran very smoothly.

- It was a learning curve for the students. The questions were rather challenging for our students especially our ESOL students (majority of the class) - involving a lot of thinking (not black and white answers) as to what answer was the best fit. Overall the students responded well to the test.

- Some of the words were very difficult, for children who are not reading at the level of their peers to read. e.g.. Synagogue. Even some of the better readers had to have some words read for them. As this was I test of knowledge and not reading ability some of our Senior children read the questions for lower level readers. Several questions were ambiguous. (Can't remember which ones, sorry. I should have written them down.) With a very high total of children not attending church and not receiving the back up at home, many children do not retain the knowledge they have been taught it pervious years. It becomes very difficult for the classroom teacher to ensure that they are receiving all the knowledge and understanding they need. It has to be a two way deal and it is becoming more and more obvious that parents expect the teacher to do their job for them.

- The reading and comprehension aspect of the test was too hard for many students, particularly my dyslexic and English language learners. Out of 11 year 4 students I had to do the reading for 8 children. With 40 questions each this took most of the morning, meaning I couldn't teach the rest of my class, the just had to work independently. Perhaps less questions could be helpful, or using language that is more appropriate for year 4 children. Off the top of my head some of the words they struggled with were: Zaccheus, Ascension and Pentecost (they are familiar with these words verbally).

- I found the process took up a lot of time and I question the overall value of this sort of assessment. I think that it is going backwards from what modern teaching practice is trying to achieve and I would be disappointed if this became an annual form of evaluation and assessment. I also question the timing of this in the Christchurch diocese when there are still a number of very pressing issues which are yet to be solved in post earthquake Christchurch. I feel that the Catholic Education Office has spent a great number of hours in getting this underway when schools such as Marian College are yet to even have a decision as to where their school can be built. Surely this should be a top priority.

(6) Emerging Learnings
We will have our first glimpse at the statistical analysis that will highlight the statistical validity and reliability of our questions in November 2015. We will need at least one full run through the process in 2016 (and probably 2017) before we will be in a position to have a bank of 150+ valid and reliable questions from which we will be able to begin to engage and have meaningful discussion.

We will also get our first glimpse of our class and school feedback data in November; but we won't be able to put too much emphasis on it because we will not know how many valid and reliable questions each Year 4 student received in our first run through the online RE assessment process.

That said, your initial feedback on the process has already, in my opinion, given us great food for thought and wise professional contemplation ☺ For example:

(a) The question of reading is an interesting one and it seems to me that the strategy employed by some teachers of getting older students who were trained in the dos and don'ts of being an assessment reader to be readers (or one case fast finishing Year 4 students) and read the questions to ESOL students and students who struggle with reading is a great idea ☺

(b) Some of the words were difficult; yet these words are part of the Years 1-4 RE curriculum for NZ Catholic schools. This poses a challenge as students are unlikely to encounter such religious language outside of the RE classroom and Mass on Sunday, should they be fortunate enough to be part of a family that attends Mass regularly.

Perhaps an important emerging learning is for DRSs to work with Cushla O'Connor (Primary RE Adviser) next year to construct a religious education word list for each year level and then provide teachers with activities (e.g. Quizlet or a good old fashioned hands on match the meaning to the word game) that match the word to its meaning. There may be scope here to also provide an RE spelling list and appropriate attendant spelling activities for each of the year levels.

These might provide all important maintenance activities for students ☺

(c) It is acknowledged that some "questions were ambiguous" and some questions were very difficult, "involving a lot of thinking (not black and white answers) as to what answer was the best fit".

Any ambiguous questions are likely to be deemed invalid by the statistical analysis that Patrick will undertake on our behalf … and this is to be expected as it was our first ever shot at writing such assessment questions. The writing party members will testify to the challenge of constructing such questions!

We will reconvene the writing parties in 2016 to re-write questions that, upon statistical analysis, are deemed to be invalid and/or unreliable.

It is also acknowledged that some questions were "very difficult" and this was by design. The writing parties tried to come up with easy, medium and hard questions for each concept. This is so our best students can be stretched in their thinking. We wait to see how we might have fared in this regard!

As the process matures over the coming years, we hope to get to a point where each student will get an equal number of (randomly assigned) easy, medium and hard questions (for want of better terms) in their assessment.

(d) One person provided this feedback, "I question the overall value of this sort of assessment. I think that it is going backwards from what modern teaching practice is trying to achieve."

The view of Professor John Hattie and the view of ERO is clear … Leaders and teachers are:

> asked to account for their 'overall teacher judgements' in the major domains – if they rely solely on tests, they fail; if they use no tests they fail – they must defend their day-to-day judgements about the interpretation of the meaning and consequences of evidence from multiple sources.[21]

> data literate: posing focused questions; using relevant data; clarifying purpose(s); recognising sound and unsound evidence; developing knowledge about statistical and measurement concepts; making interpretation paramount; and having evidence-informed conversations[22]

Our research/professional learning project sits alongside current individual RE teacher practice in formative and summative testing, and day-to-day teacher judgements, where teachers interpret meaning and consequence from multiple sources of evidence.

Our project seeks to provide an additional, objective, statistically valid and reliable, data set that will add to individual and collective teacher conversations about the effectiveness of RE teaching within schools and across clusters of schools.

Our project does not aim replace a teacher's daily and weekly self-review of the effectiveness of their teaching practice; it simply aims to provide an external data source for such individual teacher and syndicate and school professional reflection.

We are seeking to add to the evidence base from which teachers and schools might reflect upon the impact their teaching practice has had on their student's learning over a four-year period.

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[21] https://www.pearson.com/hattie/solutions.htm (p.8)
[22] http://www.ero.govt.nz/Review-Process/Frameworks-and-Evaluation-Indicators-for-ERO-Reviews/School-Evaluation-Indicators-2015-Trial (p.41)

Should our research/professional learning project ultimately be seen to be a helpful process, this data source will also enable schools to reflect upon their teaching practice on cohorts of students over time.

In my view, our research/professional learning project affords the possibility of providing an additional data set that will support quality modern teaching practice.

(e) With respect to this feedback:

"I also question the timing of this in the Christchurch diocese when there are still a number of very pressing issues which are yet to be solved in post earthquake Christchurch. I feel that the Catholic Education Office has spent a great number of hours in getting this underway when schools such as Marian College are yet to even have a decision as to where their school can be built. Surely this should be a top priority."

The writer notes that there are a number of work streams he is responsible for; each is important and each has its own rhythm.

With respect to our research/professional learning project, the writer's role is to champion this innovation and ensure a smooth roll of the process out to students, teachers and schools.

The real work comes from the members of the question-writing working parties …

Cushla O'Connor (Primary RE Adviser, Catholic Education Office, Christchurch)
Kath Clark (DRS, Sacred Heart School, Addington)
Leigh Cunningham (DRS, St Joseph's School, Rangiora)
Elizabeth McDowell (DRS, Our Lady of the Assumption School, Hoon Hay)
Maria McDonald (DRS, St Mary's School, Christchurch)
Jacque Culling (DRS, Christ the King School, Burnside)
Catherine Quinn (DRS, St Albans Catholic School)
Catherine Rush (DRS, St Joseph's School, Ashburton)
Angela Marshall (Principal, St Joseph's School, Fairlie)
Bernadette Ewer (DRS, St Joseph's School, Pleasant Point)
Suzy Duffield (DRS, St Joseph's School, Temuka)
Debbie Plant (DRS, Sacred Heart School, Timaru)
Trish McCambridge (DRS, St Joseph's School, Timaru)
Carmel Brosnahan-Pye (Principal, St Joseph's School, Timaru)

… we are all indebted to these professionals for their willingness to share their wealth of RE knowledge and curriculum expertise and leadership in our question-writing workshop days ☺

(7) Conclusion
We wait with interest the return and analysis of the data, from Patrick, in November 2105.

That said, we acknowledge that at this point in our project we will not yet be able to place any great weight on the data we receive on our classes, as we will not know how many valid and reliable questions each Year 4 student received in this first run through the online RE assessment.

We look forward to reconvening our writing parties in 2016 to re-write questions that, upon statistical analysis, are deemed to be invalid and/or unreliable ☺

We look forward to working with DRSs and Year 4 teachers on the activities that your initial feedback have suggested might assist our classroom practice and student learning ☺

We are seeking to create a culture of trust, to use the power and wisdom of teacher expertise in the question writing process supported by the power and capacity of cloud-based computer technology to enable us to better answer the questions about what students know and what the appropriate next steps might be for our individual and collective teaching practice.

As Professor John Hattie says:

> Teaching is to **DIE** for …
> **D**iagnose what they do/don't know; **I**ntervene; **E**valuate your impact … repeat.

We have moved from basecamp and have begun to ascend our research/learning mountain ☺

We will let you know the places we end up as we continue our adventurous ascent.

Mike Nolan ☺
Manager
Catholic Education Office
Christchurch

(4 October 2015)