Student perception of Teaching-research nexus (TRN): Greater need for utility of research into curriculum Frances Fan^, Susan Salter* and Rajaraman Eri*

Schools of Health Sciences* & Education^, UTAS. Correspondence: Raj Eri rderi@utas.edu.au

Abstract

Research informed teaching (RIT) is a term usually referred to as Teaching-Research Nexus (TRN). It can be defined as the link between multiple discipline research and how it translates into learning and teaching (Brew, 2010; Visser-Wijnveen, Van Driel, Van der Rijst, Verloop and Visser, 2010, Williams 2013). The idea of RIT not only involves high quality research in various disciplines but also draws on research about curriculum design and increasing student participation in research work (Lingard and Renshaw, 2010; Gresty and Edwards-Jones, 2012). RIT at times is misunderstood to include only pure basic research that does not include educational research. In fact, RIT is an important aspect of pedagogical content knowledge as described by Boyd and Smith (2016). On the other hand, research work done by Pascarella and Terenzini (2005) based on student-surveys, indicated that research productivity and high quality teaching are at the opposing ends of the spectrum. We conducted a student survey at the UTAS Faculty of Education on TRN with questions related to understanding, perception, curriculum, learning experience, and value of research skills. A survey was conducted with 78 students, majority of whom are students from undergraduate degrees and a few from Higher Degree Research students. Descriptive statistical tests, such as means and medians were calculated. Non-parametric tests, including Kruskal-Wallis tests, were also conducted to examine differences between the different participant groups. Key results include a better perception of lecturers' research being appreciated by students in addition to a majority of students viewing research as an important aspect of their university learning experience. All the statistical and qualitative analyses of the survey will be presented along with the study's potential impact on future learning and teaching.

Background

Employers will increasingly demand that graduates have the skills to conduct appropriate research, the capacity to formulate solutions to problems based on awareness of research evidence, and the ability to critically assess that evidence: in other words knowledge creation and use

Positive TRN link well supported Newby, 1999

> Zaman, 2004 Rut

Negative link is also reported

Hattie & Marsh, 1996- Aussie study Ramsden & Moses, 2002 Tramwell, 2004 There is a lack of policy statements by universities which detail how students are taught and engaged in an atmosphere of learning informed by research and engaging in research activities at undergraduate levels.

Krause, 2007

Approach One

Views of Employers

- 6 employers will be interviewed
- Aspects of TRN which will increase employability will be explored



ApproachThree

Focus group

- 12 Academics from the Faculty of Health Science were interviewed
- Key aspects explored include interpretations of "research", curriculu m context, RIT vs TIR, links between research and teaching and the factors which may influence this link

Findings

- Majority (8/12) of the academics don't understand or implement TRN
- Not enough evidence to show TRN enhances T & L
- No evidence of impact on staff research on their teaching
- Strong rejection of the term
 "Nexus" in TRN

STUDENTS PARTICIPATE



RESEARCH PRACTICE

RESEARCH INFORMED UNDERGARD PRACTICALS, WORKSHOPS, ASSESSMENT, STUDENT RESEARCH PROGRAMS, PRIZES,

RIT continuum

Increased interaction Curriculum development

T & L conferences
Staff Publications
UTAS journals
Grad Cert in T & L

RESEARCH INFORMED UNDERGARD UNIT DESIGN, LEARNING OUTCOMES, ENCOURAGEMENT, HISTORICAL CONTEXT

RESEARCH LEARNING



STUDENTS LISTEN

Approach Two

Review of Unit Outlines

 Unit outlines will be assessed for evidence of RIT using a relevant bank of keywords



Approach Four

RIT Surveys of Students

- 78 respondents from Education discipline, as a pilot study
- Key aspects explored include students' views on the importance of TRN, and currently how TRN has influenced their study in their course

Findings

- Students believe research skills have value in their study, employment, and life in general
- HDR/older students have higher awareness of the importance of TRN, than undergraduates
- Gender is not an influential factor in students' understanding of TRN

Suotes

"Rather than direct teaching of research concepts, we teach more of analysis and application"

"Most of the times, for my large group of students I only have time to deliver content"

"I'm talking about the process of my teaching and what I am teaching, not teaching research"

"In primary School, they learned to be enquiry based learners, I wish our students could do that at Uni"

The UTAS Context

• Improve curriculum and affirm teaching – research nexus (Open to Talent)

rch

Multi-Discipline

- Enhance Student experience through research/practical skills (UTAS L&T Plan Objective)
- Will overall improve unit and course content, student learning, student experience and employer preference for UTAS

Quotes

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