COMMITTEE FOR THE ADVANCEMENT OF LEARNING AND TEACHING

REPORT ON GRANT

As of 31 March 2014

Name:	Sheila Skeaff
Department:	Human Nutrition
Title of Project:	Greening the curriculum to develop environmental literacy in human nutrition students
Amount Awarded:	$8659 (Amount expended: $5025 Amount remaining: $3634)
Aims of Project:	To determine if the inclusion of a "sustainable nutrition" component into a core second year Human Nutrition paper is able to increase awareness and knowledge of environmental issues

Progress on Project:

Phase 1: Modification of the Environmental Literacy Evaluation Index (ELEI)

Completed.

Two part-time research assistants were employed during 2013 to modify the original ELEI (developed by Kerry Shepherd and colleagues in 2011 and 2012 under previously funded CALT grants) in order that it Section B and Section C were nutrition specific. The revised nutrition ELEI (or Nutrition Environmental Literacy Survey) was reviewed by 10 academic and post-graduate students for content and readability. The Nutrition Environmental Literacy Survey was then administered to 30 third year Human Nutrition Students, to ascertain typical responses to questions. The results of 28 returned surveys were used as a guide to determining the correct responses for Section C.

Phase 2: Revision of module on "sustainable nutrition"

Completed.

Dr Skeaff revised her "Sustainable Nutrition" module in HUNT 223 with input from Professor Murray Skeaff, student feedback from 2012, and inclusion of additional resources collated by one of the research assistants. The module (3 lectures and 2 practical sessions) was taught between 16-30 September 2013.

Phase 3: Application of Nutrition specific ELEI before and after module on "sustainable nutrition"

Completed.

The Nutrition Environmental Literacy Survey was administered at the beginning of a HUNT 223 lecture one week before and one week after (13 September and 4 October 2013) the module on "sustainable nutrition". Of the 120 students in HUNT 223, 74 students completed the first questionnaire and 59 students completed the second questionnaire, with 55 students completing both questionnaires. I have included some of the results from the project as follows.

Table 1 presents the scores for Section A which consists of 15 questions that make up the New Educational Paradigm, a commonly used tool to assess environmental attitudes. There was a significant change in attitudes (i.e. students attitudes became "greener") for the recycle and conserve subset and for the overall NEP score. It would be of interest to ascertain if this change in attitudes was maintained and Dr Skeaff plans to ask the same HUNT students to complete the nutrition-specific one year later (i.e. in 2014).

Table 1
Score for New Educational Paradigm (NEP) and subsets of university students taking Nutrition major before and after teaching intervention[1]

	Pre-intervention score n=74	Post-intervention score n=59	*P*-value[2] n=55
Recycle	9.0	8.2	0.004
Conserve	12.9	11.4	<0.001
Rights	6.2	5.9	0.058
Cautious	7.4	7.3	0.631
Total NEP Score	35.7	32.7	<0.001

[1] Lower scores indicate "greener" attitudes.
[2] Paired t-test of students who completed pre and post questionnaires.

The second (i.e. post-intervention) questionnaire contained an additional section (Section D) on environmental behaviours, which was included after discussion with Associate Professor Niki Harre, a sustainability expert from the University of Auckland. Table 2 indicates that this group of Human Nutrition students have relatively "green" behaviours with regard to transport and recycling, not surprising given that Dunedin is a small city and most students live close to campus. However, sustainable food or nutrition-related behaviours, are more variable.

Table 2
Environmental behaviours of university students taking a Nutrition major

Behaviour	%					
	Not possible	Never	Occasionally	Sometimes	Often	Always
Walk/Bike/Skateboard to or from university	5	3	2	2	6	82
Drive/Ride in car to or from university	25	53	11	3	0	5
Bus to or from university	18	77	3	0	0	0
Recycle glass bottles at university	26	40	3	10	7	15
Recycle glass bottles at flat/hostel	8	2	6	6	6	71
Recycle plastic and paper at university	6	29	23	21	8	13
Recycle plastic and paper at flat/hostel	5	2	2	11	19	61
Conserve power at flat/hostel	2	0	3	27	37	31
Buy locally grown food	5	39	36	19	2	0
Buy organic food	6	55	23	18	2	1
Eat food NOT purchased (i.e. grown in garden, harvested/caught yourself)	18	47	18	13	5	0
Compost food scraps or have very little food waste	8	37	18	15	18	5
Buy bottled water	2	60	19	13	5	2
Purposely made a food choice that was "better" for the environment	3	15	21	45	15	2

Any other comments:

A 4th year Human Nutrition student is currently conducting a literature search on sustainability and nutrition and will be assisting Dr Skeaff in writing up the results of this project for publication in a peer-reviewed nutrition journal. The papers will include the results presented in this report and the additional results from Sections B and C. I will forward a copy of the paper to the CALT committee when it is published online.

Dr Skeaff plans to present the results of the project at the g Spotlight on Teaching and Learning colloquium in August 2014.

Signature:

Date: