



SALSA 2020

Monitoring and Evaluation Annual Report

Prevention Education and Research Unit (PERU)

Research and Education Network

Western Sydney Local Health District

SALSA 2020
Monitoring and Evaluation Annual Report
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Executive Summary

The *Students As LifeStyle Activists* (SALSA) program is a peer-led leadership program designed to motivate students to increase physical activity and improve diet. The SALSA program is traditionally a school-based face-to-face program. However, the COVID-19 pandemic in 2020 impacted the delivery method and the number of participating schools. The pandemic situation required the SALSA program to adjust its delivery from face-to-face to an on-line format.

The digital translation of the SALSA program involved a partnership between Foundations.T4L, NSW Department of Education and the Prevention Education and Research Unit (PERU). The on-line version of the SALSA program involved delivering the program in three rather than four lessons and modifying the outdoor activities for physical activities that were suitable in a classroom setting.

The on-line program for the SALSA Peer Leader Workshop (PLW) was piloted and evaluated in two western Sydney high schools and run in one other NSW high school. The student feedback and process evaluation showed that the SALSA PLW could be translated to a digital format and delivered on-line.

SALSA Educators

Early in 2020, prior to the COVID-19 pandemic, two SALSA Educator training workshops were conducted with 29 university students. Due to the pandemic restrictions, university students were unable to deliver the SALSA PLW in schools.

The university students who participated in the SALSA Educator workshops were mostly women (72%), aged 18-24 years (79%), from English speaking backgrounds (76%), and attended the University of Sydney (55%). Students were enrolled in medicine (35%), public health (17%) and other (35%) faculties.

University students rating of the training workshops:



Figure 1. Key skills gained by the university students: leadership, communication, public speaking.

Schools

Seven schools participated in a PLW. Three schools participated in face-to-face PLW, three schools participated in the on-line workshops, and one school used a teacher delivery model. The mean Index of Community Socio-Educational Advantage (ICSEA) for participating schools was 962 (range 883-1061).

Peer leaders delivered the SALSA program to Year 7/8 students in three schools and in one school, teachers delivered the program to Year 7 students.

SALSA Peer Leaders

In total, 160 students (134 Year 10 and 26 Year 8 students) participated in a PLW. Of these, 141 (88%) completed the pre-workshop questionnaire and 73 (46%) completed the post-SALSA program questionnaire. Post-SALSA program, approximately half of the peer leaders reported learning that small changes to eating and physical activity can have a positive impact on health.

Table 1. Percentage of SALSA Peer Leaders meeting the Australian recommendations

Health Behaviour	Pre (n=141)	Post (n=73)	NSW students*
Fruit	79%	85%	80%
Vegetables	13%	18%	10%
Breakfast	47%	44%	55%
Sugar Sweetened Drinks	3%	8%	9%
Physical Activity	20%	15%	10%

* Hardy LL et al, NSW School Physical Activity and Nutrition Survey 2015¹

Year 8 Students

In total, 817 students in Years 7/ 8 received the program. Of these, 290 (35%; 55% girls) completed the pre-SALSA program questionnaire and 185 (23%, 50% girls) completed the post-SALSA program questionnaire. Post-SALSA program, 54% of girls and 37% of boys reported learning that small changes to eating and physical activity can have a positive impact on health.

Table 2. The percentage of Year 8 students meeting the Australian recommendations

Health Behaviour	Pre (n=290)	Post (n=185)	NSW Students*
Fruit	68%	80%	79%
Vegetables	6%	13%	11%
Breakfast	28%	44%	64%
Sugar Sweetened Drinks	16%	9%	10%
Physical Activity	21%	18%	13%

* Hardy LL et al, NSW School Physical Activity and Nutrition Survey 2015¹

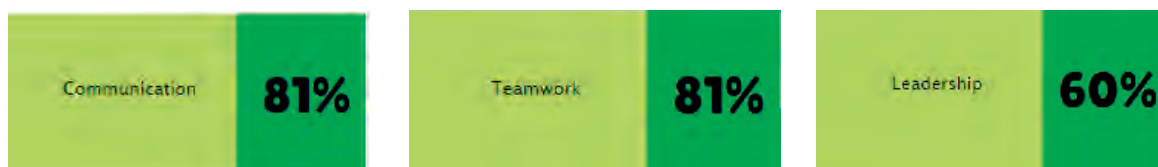
Conclusion

The COVID-19 pandemic impacted on the usual delivery of the SALSA program; however, it provided an opportunity to digitalise the program for on-line delivery. While face-to-face delivery remains the preferred delivery mode, the digitalisation of the program will allow the SALSA program to reach regional high schools in NSW. Fruit and vegetable intake increased both in peer leaders and Year 8 students and the consumption of sugar-sweetened beverages decreased in Year 8 students. Physical activity decreased in both groups, which may have been associated with certain COVID restrictions. The process evaluation showed the digitalisation of the program and on-line delivery was successful and maintained fidelity to the original face-to-face program.

SALSA Youth Voices

SALSA Youth Voices is an additional module offered to SALSA schools for SALSA Peer Leaders to further build leadership and advocacy skills. The pandemic situation required the digitalisation of the leadership workshop so that it could be conducted on-line via Zoom using the schools learning platform (i.e. Google Sites, MS Teams or Google Docs) and other interactive on-line learning tools (e.g. Mentimeter, Padlet and Kahoot). Fifty-five peer leaders from five high schools participated in the SALSA Youth Voices Leadership Online workshops.

Surveyed students reported building the following skills:



Student ideas to promote healthy diet and physical activity in their school included:

- Shelters for handball and volleyball courts
- Synthetic surface replacing a grass sports oval
- Develop a sports club
- Paint playground handball and volleyball courts
- Water refill stations

The Mount Druitt Medical Practitioners and the Hills Doctors Associations provided each school in their area with \$500 to help students implement their School Action Plan. The Students were given the opportunity in Term 1, 2021 to showcase their School Action Plans to a forum of education and health professionals.



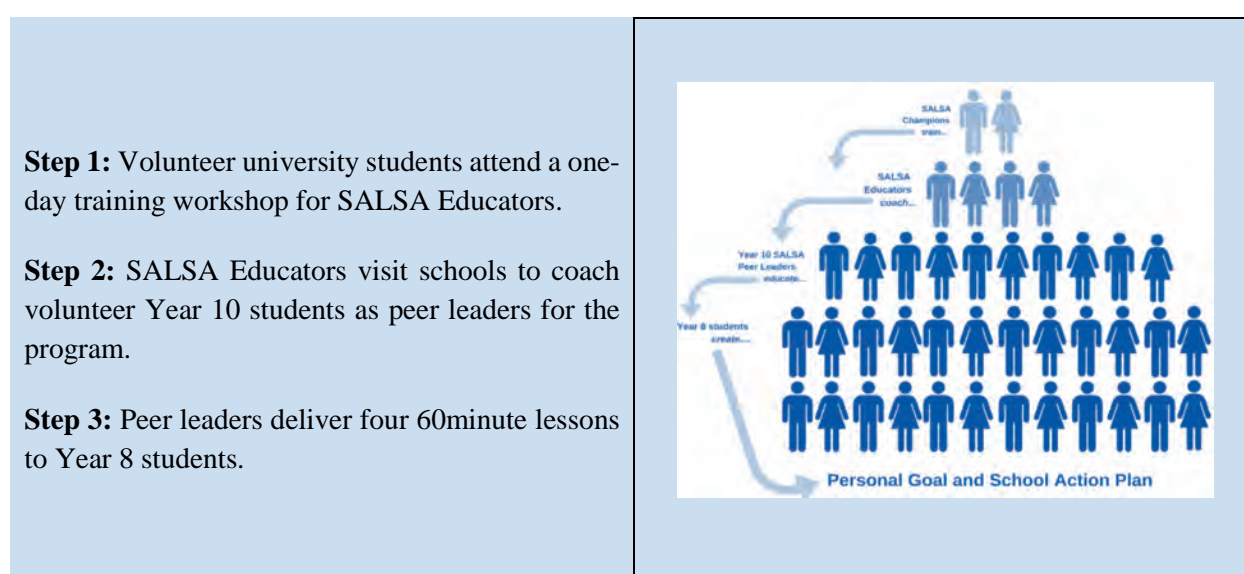
SALSA Online, Nepean CAPA High School

The SALSA Program

SALSA is an award-winning, peer-led leadership program involving university and high school students. The program uses student-centred activities that motivate high school students to make healthier lifestyle choices that are associated with the prevention of chronic disease. The theoretical framework of the program is based on Bandura's Social Cognitive Theory² and empowerment education approach³.

The program involves an educational three-step process of peer-led leadership (Figure 1). Since 2005, the SALSA program has trained approximately 500 university students from eight NSW universities as SALSA Educators and reached over 24,000 high school students in 38 high schools in Sydney, Australia.

Figure 2. SALSA program peer-led leadership model



SALSA Program links to the PDHPE Curriculum

The lesson content of the SALSA program for high school students is linked to Stage 4 and 5 of the NSW Personal Development, Health and Physical Activity (PDHPE) curriculum⁴. (Appendix 2) Accordingly, students learn to:

- Think critically, solve problems and make informed decisions on health, safety, wellbeing and physical activity
- Explore issues that impact the health, safety and wellbeing of themselves and others
- Participate in movement experiences that are regular, varied, purposeful, challenging and enjoyable

Ethics Approvals

Extensions of ethics approvals for the SALSA program have been granted by the University of Sydney's Human Research Ethics Committee (#2019/816) for 2019-2023 and from the NSW Department of Education's State Research Application Process (SERAP 2014096). Data was collected under an opt-out consent process for university and school students.

Monitoring and Evaluation

The SALSA program outcomes are evaluated via an online questionnaire, to ascertain whether there are any changes in students eating and physical activity habits. The questions come from NSW state population surveys and the responses are compared with the national dietary and physical activity recommendations for adolescents ^{5 6} (see image below). Copies of the questionnaires are located in Appendix 5.

To determine the benefits for students participating in the program, we collected qualitative data from university students and from peer leaders, at the conclusion of the SALSA Program.

The following questions are about your eating and physical activity - there are no right or wrong answers

This is what 1 serve of fruit looks like:



8) How many serves of fruit do you eat each day (include fresh, packaged, or dried)

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 or more

This is what 1 serve of vegetables looks like:



9) How many serves of vegetables do you eat each day (include fresh, packaged, or frozen). A serve = 1/2 cup of cooked vegetables or 1 cup of salad vegetables.

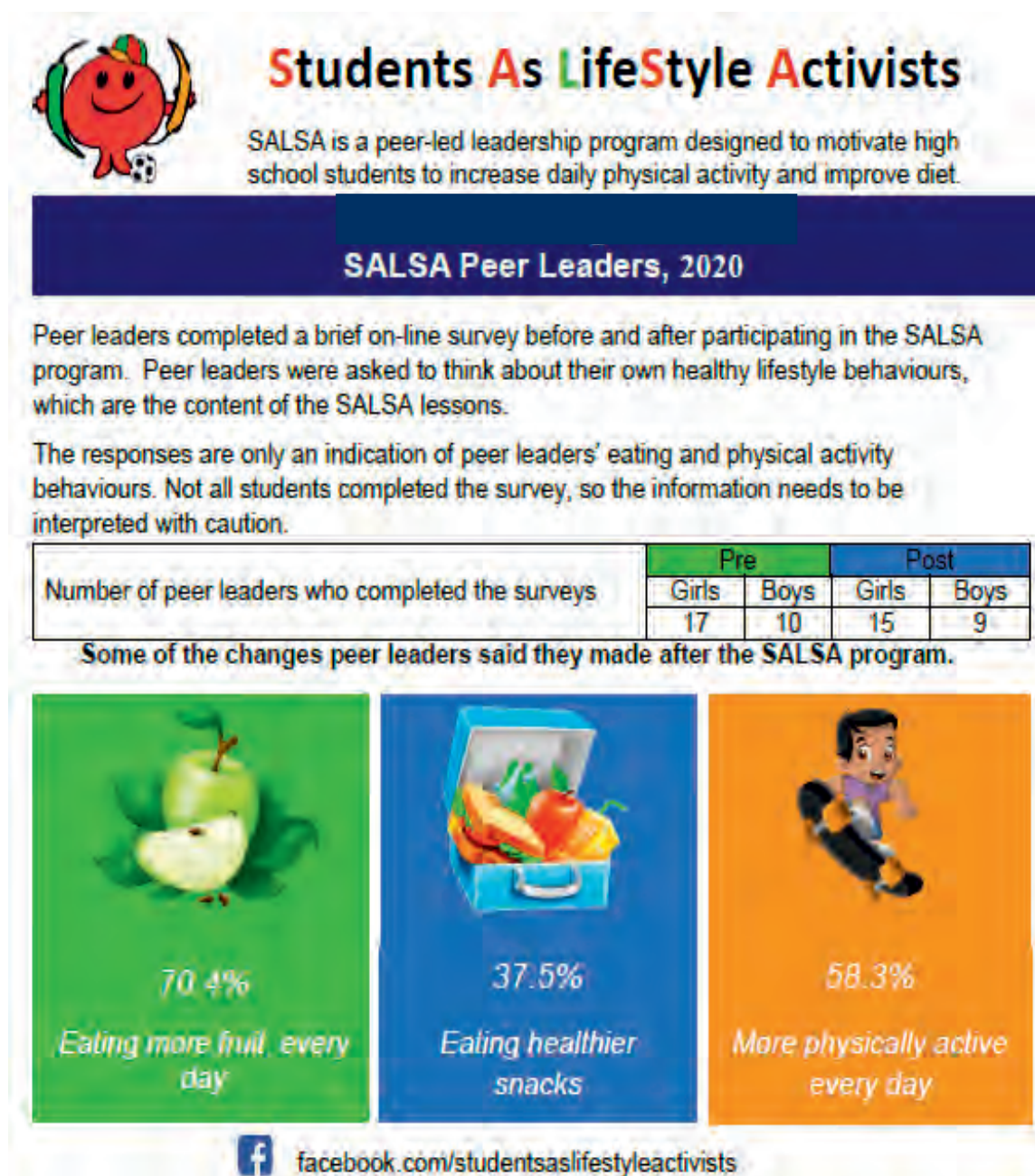
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 or more

10) How many days a week do you usually eat breakfast?

☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

Reporting back to school

We provided each participating school with an individualised report based on student responses (see example below).



Comments from Principals about the school report

“Thank you for the opportunity to work with the SALSA program once more this year- This program changes lives in a positive and sustainable way”. Nepean CAPA HS

“SALSA has provided wonderful and authentic opportunities for our students to reflect on leadership in relation to healthy lifestyle. Our Canteen has experienced significant increases in the consumption of water and reduction in sugary drinks”. Colyton HS

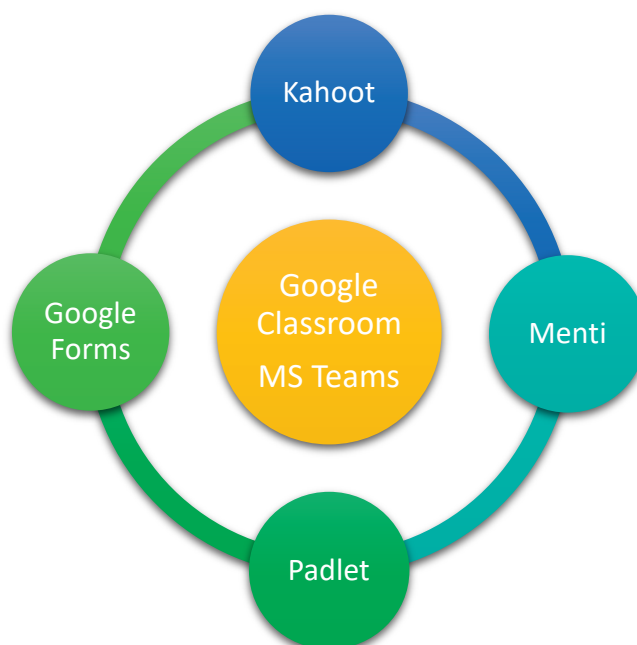
“Anytime there is fruit and chips available to students for free at the front office, students will take the fruit in the first instance”. Chifley College Mount Druitt Campus.

Digitalising the SALSA Program

Face-to-face delivery of the SALSA program is the preferred method, however in 2020, the COVID-19 pandemic forced a re-think of the delivery of the SALSA program to include delivery using a digital format. Moreover, the digitalisation of the program was a step towards program sustainability and provided an option for rural and regional schools to participate in the program.

The digitalisation of the SALSA program was a partnership between the PERU and Foundations.T4L. A reference committee, SALSA On-line Committee (SOC), of health, education professionals and school students, was established to provide insight, advice, and feedback to adapt the face-to-face SALSA program to an online learning platform. The SOC Terms of Reference are located in Appendix 1.

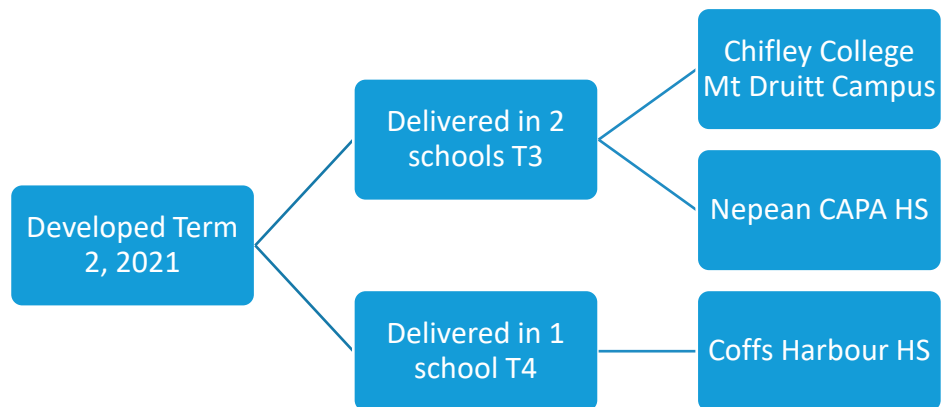
The initial digitalisation focus was to translate the face-to-face SALSA Peer Leader Workshop and pilot the delivery by PERU staff with IT and pedagogical support provided by Foundations.T4L. This included advice about game-based learning platforms and apps (e.g., Mentimeter, Kahoot), and hosting the SALSA program on the NSW Department of Education's Google Sites.



SALSA Online required minor changes from the face-to-face delivery, including reducing the original four lessons to three lessons and modifying outdoor activities (e.g., Ultimate Frisbee and Dinner Plate Race) for physical activities that could be conducted in a classroom setting. All activities remain mapped to Stage 4 PDHPE Syllabus Outcomes (Appendix 2). An outline and description of the lessons and the resources for each lesson are in Appendix 3.

The on-line SALSA program was accessible on both Google's G Suite and Microsoft Office 365, free to all NSW Public School students. Both systems provide secure access, storing, sharing and editing of files. Depending on the school, all resources were uploaded to either the Google Classroom or MS Teams. Participating schools were provided with the details to access the SALSA program and resources, including adding the SALSA Coordinator as an administrator.

SALSA Online Delivery Timeline



The digital delivery of the program by facilitators (PERU staff and Foundations.T4L staff) was conducted via Zoom, a teleconferencing platform that has end-to-end encryption, is free and compatible with Windows and Mac. The SALSA Coordinator supervised and organised the SALSA Peer Leaders into four groups. At the start of the workshop students logged in to the school server to access the SALSA program.

For each workshop Foundations.T4L provided the IT support. Foundations.T4L provided access to Google Forms and generated summaries of student's responses. Many of the activities were done in small groups with one student from each group submitting the group worksheet. A timer was shown on the Zoom screen to help keep students on time for each activity. This link provides a short YouTube clip of the SALSA on-line program <https://www.youtube.com/watch?v=Eoo5BEAbLko>.



Evaluation of the SALSA on-line Program

We conducted a process evaluation to assess the fidelity, dose, adaptation, and quality of the on-line delivery of the SALSA program. Process evaluation was undertaken in two schools that piloted the delivery of the digitalised version of the SALSA program. The schools selected used different platforms, one Google Classroom the other MS Teams.

The framework for the process evaluation was adapted from Carroll⁷ and measured three criteria:

1. **Dose:** assessment on lesson delivery – lesson order & timing. Are the students receiving the same lessons as they would do in face-to-face delivery?
2. **Adherence:** were resources used correctly
3. **Participant response:** Students' responsiveness (interest & engagement).

The evaluation template (Appendix 4) shows the components of each lesson including allotted time and whether this was adhered to, whether all the SALSA resources (worksheets, videos, activities) were used, and student's responsiveness to the program. If an implemented intervention adheres to the content, frequency, duration, and coverage prescribed by its designers, then fidelity can be said to be high.

Additionally, at the end of each lesson, students were also asked to evaluate the lesson through Google Forms. Students were asked: a) *How was this lesson?* b) *What did you like in this lesson?* c) *What would you change in this lesson?*



Results

We piloted the on-line delivery of the SALSA PLW in two schools. Tables 1 and 2 show the process evaluation templates completed by PERU staff during the SALSA Zoom sessions. Overall, 100% of peer leaders appeared interested and engaged in the workshop, however engagement dropped off among some students towards the end. The program resources were used correctly.

Table 3. Evaluation of the on-line SALSA program delivery in School 1

Evaluation criteria				Comment
Dose/Exposure	Time allocation (mins)	Adhered	Y	Minor IT issues, students over-extending breaks, extra time to organise students for activities. Students appeared embarrassed when focus of attention in activities. PL practices session omitted.
		Actual	-	
Adherence	Resources used		Y	Yes, minor IT issues with videos
			N	
	Used correctly		Y	
			N	
Students' responsiveness	Interested (%)		100	Most students appeared interested throughout the workshop
			66	Engagement dropped-off around break times and towards the end of the workshop
			33	
			0	
	Engagement (%)		100	Most students appeared engaged throughout the workshop
			66	Engagement dropped-off around break times and towards the end of the workshop
			33	
			0	

Table 4. Evaluation of the on-line SALSA program delivery in School 2

Evaluation criteria			Comment
Time allocation (mins)	Adhered	Y	IT issues, students over-extending breaks. PL practices session omitted
		N	
	Actual	-	
Resources used			
		Y	
		N	
Used correctly			
		Y	Yes & No. IT problems with platform preventing smooth transaction to resources
		N	
Interested (%)			
		100	All students appeared interested throughout the workshop
		66	
		33	
		0	
Engagement (%)			
		100	All students appeared engaged throughout the workshop
		66	Engagement dropped-off among some students towards the end of the workshop
		33	
		0	

Student feedback

We asked students via Google Forms: 1) *How was this lesson?* 2) *What did you like in this lesson?* 3) *What would you change in this lesson?* Approximately 90% of students reported that the lessons were good, and over one-third liked all the lesson activities. The activities *SALSA Kahoot* and *Lunchbox Lotto* were particularly well-received. A small proportion of the students reported they would like to change the *Simple Changes Video*, *On-line physical activity*, and *My SMART Goal* activity. Student feedback from the two schools were combined, and results are shown in Figures 2-4.

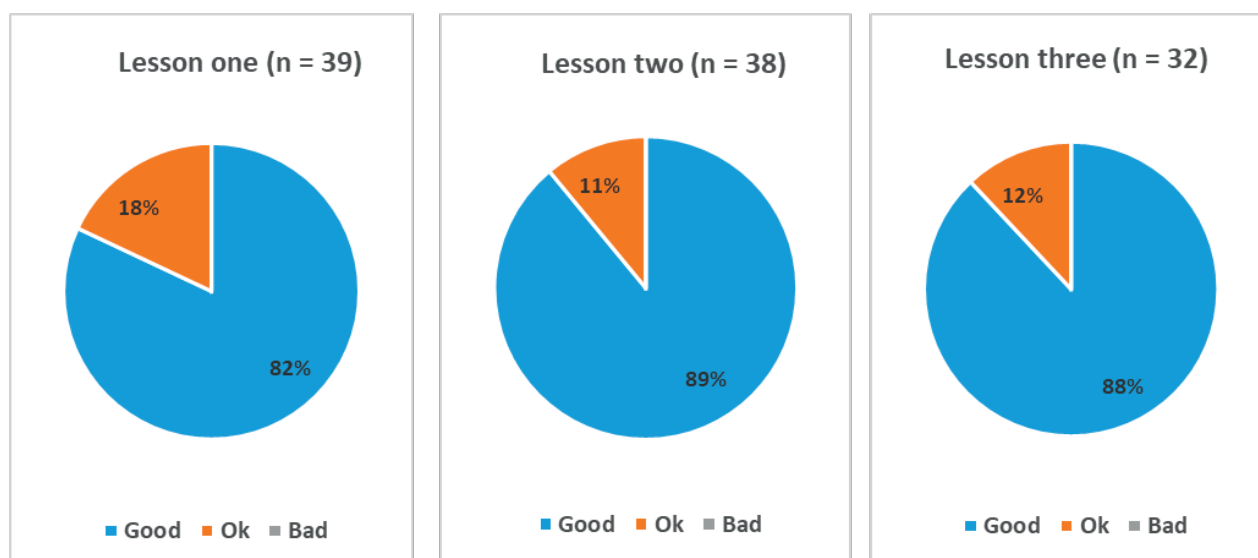


Figure 3. Student responses to the question “*How was this lesson?*”

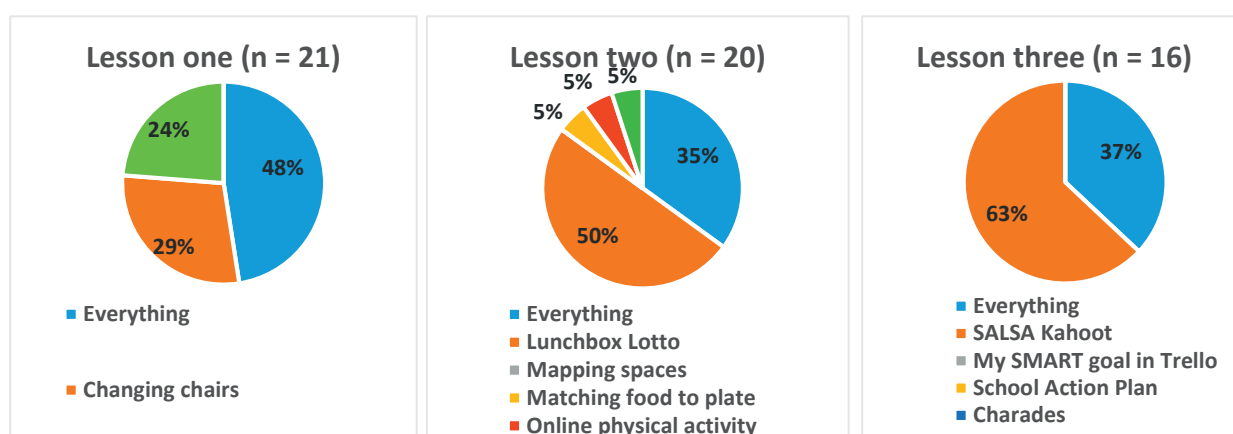


Figure 4. Student responses to the question “*What did you LIKE in this lesson?*”

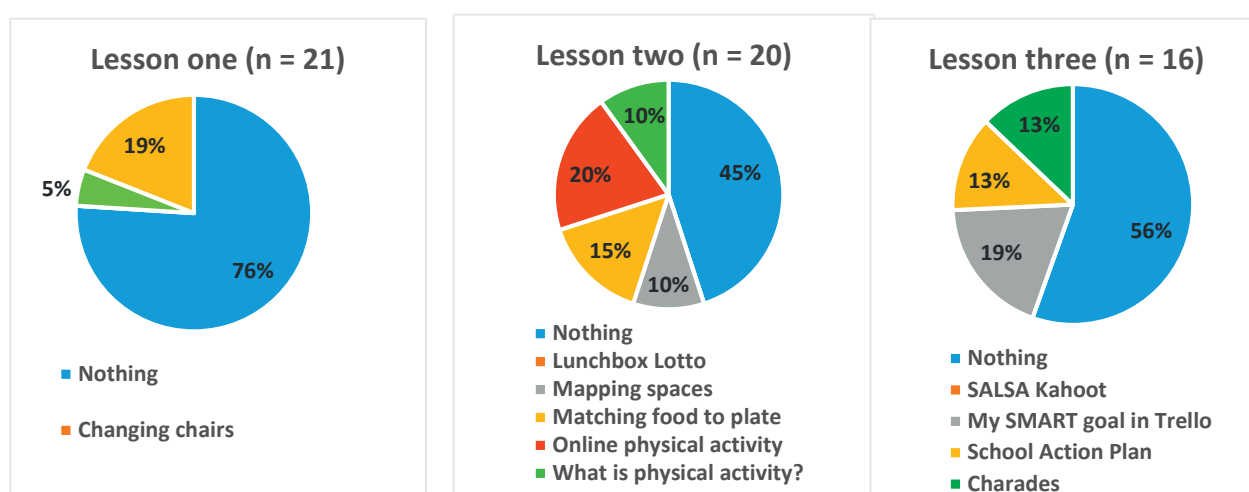


Figure 5. Student responses to the question “*What would you like to CHANGE in this lesson?*”

At the end of the on-line PLW, students provided further feedback on the workshop using Mentimeter. The images below provide examples of the responses received from students at one of the participating schools.



SALSA Educators Workshops

Volunteer university students were recruited through university and academic communications, from the University of Sydney, University of New South Wales, Macquarie University, Australian Catholic University, Western Sydney University and the University of Wollongong.

In 2020, only two training workshops were conducted before the COVID-19 pandemic impacted on usual business. University students completed an on-line questionnaire at the end of the training workshop. However, because of the pandemic, university students were unable to deliver SALSA Peer Leader workshops to Year 10 high school students and therefore did not complete the follow-up questionnaire.

The questionnaire contains five questions on diet and physical activity (which are the key messages of the SALSA program) and questions on the workshop regarding its relevance to their area of study, benefits of participating in the program, areas for improvement, and confidence to deliver workshops to high school students.



Results

Twenty-nine students attended the workshops which were held at the University of Sydney (6th March 2020, n = 18) and Westmead Hospital (10th March 2020; n = 11). The demographic characteristics of these students are provided in Table 1. Most university students were women (72.4%) aged 18 to 24 years (75.9%) studying at the University of Sydney (55.2%), most were from medical or health faculties, and 24% spoke a language other than English at home.

Table 5. Demographic characteristics of volunteer university students (n= 29).

Characteristic	Prevalence (%)
Women	72.4
Language spoken at home	
English	75.9
Other	24.1
Age group	
18-24 years	79.3
25-34 years	17.2
35-44 years	0
45 years and older	3.4
University	
Australian Catholic University	3.4
Macquarie University	3.4
University of NSW	10.3
University of Sydney	55.2
University of Technology Sydney	6.9
Area of study	
Medical and health	34.5
Nursing	10.3
Pharmacy	3.4
Public Health	17.2
Other	34.5

Table 2 summarises the university students' evaluation of the face-to-face workshop. Overall, university students rated the workshop as excellent or very good and 86% reported the workshop content was relevant to their area of study. Most university students (69%) reported they were confident to deliver the SALSA Peer Leader workshop to Year 10 students.

Table 6. Educator workshop evaluation (n = 29)

Evaluation	Prevalence (%)
Workshop rating	
Excellent	58.6
Very good	37.9
Good	0
Fair	3.4
Was the content relevant to your area of study?	
Yes	86.2
No	13.8
How confident are you to deliver a SALSA Peer Leader workshop?	
Confident	69.0
Fairly confident	31.0
Not at all confident	0

Relevance of the SALSA Educator workshop

University students were asked to provide an example of how the workshop was relevant to their area of study. Examples of responses include:

Working with children and adolescents for nutrition support and lifestyle change as a future dietitian. (Female, age 25-34 years, Allied Health)

My area of study is about public health, and my particular area of interest is in obesity and children/adolescents (Male 18-24 years, Public Health)

Nurses play a major role in the education of health, so this is very relevant for my skill in the future (Female, age 18-24 years, Nursing)

I study physio and we are currently learning about the importance of prevention over treatment. I think this workshop is great as it teaches that through adopting healthy habits from adolescent, children are able to carry these habits through to adulthood and prevent the onset of many preventable diseases. (Female, age 18-24 years, Medicine)

It is a great example of how preventative health is the best and most effective form of healthcare (Female, age 18-24 years, Medicine)

Benefits of participating in the workshop

University students were asked to describe what they gained from participating in the SALSA Educator workshop. Examples of responses include:

Experiencing it as participants really helped in giving me an idea of how I'd like to run the workshop for the students by engaging them and involving everyone equally as well as just taking a backseat and facilitating. Helped me really understand the way the activities should be run. Helped me see the purpose of each of the activities (Female, age 18-24 years, Medicine)

I've learnt how to keep students involved and engaged in activities throughout the day. I've improves my teamwork and communication skills in planning for a school project and participating in ultimate Frisbee. I've learnt about tips on maintaining a healthy lifestyle! (Male, age 18-24 years, Public Health)

Developing teamwork skills through the group activities - was great to learn how to better lead activities. Better understanding of ways to improve health awareness among adolescents around exercise and diet (Female, age 18-24 years, Public Health)

Gained knowledge about health promotion techniques. How to communicate with adolescent audiences. How to engage with the audience with various activities and games. (Female, age 25-34 years, Public Health)

Workshop improvements

University students were asked how the training workshop could be improved. Approximately 41% (n=12) reported there was no aspect of the day that needed to improve. Fourteen percent (n = 4) believed having a copy of the SALSA Program Manual at the workshop would be beneficial, and four students felt more breaks were required during the workshop. Two students suggested the workshop could be run on weekends so they would not miss other classes.



SALSA Educators' Workshop

Indicators of dietary and physical activity habits

University students were asked to report the number of serves each day they ate of fruit and vegetables, how many days a week they ate breakfast, how many days a week they drank sugar sweetened beverages, and how many days a week they were physically active.

Table 3 shows the mean and proportion of university students meeting national health-related lifestyle behaviour recommendations on the training day. Estimates for Australian adult's age >18-24 years health-related lifestyle behaviours are also provided for comparability between university students and Australian adults ².

Overall, 86% met daily fruit recommendations, 31% met daily vegetable recommendations, 66% ate breakfast daily and 69% participated in physical activity at least three days a week. Fifty-five percent of students reported they did not drink SSB and 41% reported drinking SSB once a week. Compared with national estimates, a higher proportion of university students met national recommendations for daily consumption of fruit and vegetables while the other lifestyle behaviour indicators were similar to Australian adults' age 18-24 years.

Table 7. University student's dietary and physical activity habits (%)

Health-related lifestyle behaviours	Pre (n=29)	Australian adults age 18-24 years
<i>Fruit intake</i>		
Serves per day (mean)	2.7	1.2 ^a
Met recommended daily serves (%)	86.2%	46.6% ^a
<i>Vegetable intake</i>		
Serves per day (mean)	3.7	2.7 ^a
Met recommended daily serves (%)	31.0%	4.6% ^a
<i>Breakfast frequency</i>		
Days per week (mean)	4.3	N/A
Eats breakfast daily	65.5%	61.0% ^b
<i>Sugar sweetened beverage consumption (SSB)</i>		
Days per week drink SSB (mean)	0.5	N/A
Drink SSB daily (%)	0%	13.6 ^b
<i>Physical activity participation</i>		
Mean days per week	3.5	N/A
≥3 days per week (estimated adult recommendation)	69.0%	64.1% ^c

^a Australian Bureau of Statistics, Australian Health Survey: Consumption of Food Groups from the Australian Dietary Guidelines, 2011-12.

^b Australian Bureau of Statistics, Australian Health Survey: Nutrition First Results Foods & Nutrients, 2011-12

^c Australian Bureau of Statistics Australian Health Survey: Physical Activity, 2011-12

The SALSA Program in Schools

The COVID-19 pandemic limited the number of schools who could participate in the SALSA program in 2020 and on the delivery of the program. Table 4 summarises the delivery and participants in 2020. Seven schools participated, six were urban and one was regional; three schools participated in the on-line program, three delivered the program face-to-face and one school used a teacher delivery model. Summary of school characteristics, peer leader workshop delivery mode and participants, and SALSA program delivery mode and recipients are detailed in Table 4.

Table 8. Summary of the delivery of the SALSA Program, 2020.

School characteristics		Peer leader workshop		SALSA lessons	
#	ICSEA*	Delivery mode	Participants	Delivery mode	Recipients
1	1061	Face-2-face	Year 10	Face-2-face	Year 7
2	933	Face-2-face	Year 10	Face-2-face	Year 7
3	953	Face-2-face	Year 10	Not delivered	-
4	895	None	Teacher	Face-2-face	Year 7
5	998	On-line	Year 10	Mixed*	Year 8
6	883	On-line	Year 10	Not delivered	-
7	973	On-line	Year 8	Not delivered	-

* ICSEA = Index of Community Socio-Educational Advantage

** Mixed = Face-to-face delivery by peer leaders using the on-line platform resources

The Index of Community Socio-Educational Advantage (ICSEA) for each school was obtained from the *MySchool* website (<https://www.myschool.edu.au/>). The ICSEA provides an indication of the socio-educational backgrounds of students. The Index is calculated using parents' occupation, parents' education, the school's geographical location, and proportion of Indigenous students. The median score is 1000 and one standard deviation 100. In 2020, the mean ICSEA was 962 (range 883 to 1061) and six schools were below the NSW median ICSEA score (i.e. 1000).

Peer Leader workshops

In total 160 students participated in SALSA Peer Leader workshops: 134 Year 10 students from five high schools and this year, a pilot of 26 Year 8 students in one high school to be peer leaders.

Peer leaders were asked to complete a brief on-line questionnaire at the start of the workshop (i.e. pre) and after delivering the SALSA lessons to Year 7/8 students (i.e. post) on what they wanted to learn, what they learnt, indicators of healthy diet and physical activity participation and building leadership skills.

Results

Of the Year 10 SALSA Peer Leaders, 115 (85.8%) completed the pre-questionnaire, 73 (54.5%) completed the post questionnaire. Of these students, 52.2% had participated in the SALSA Program when they were in Year 8. Of the Year 8 peer leaders, 26 (100%) completed the pre-questionnaire none completed the post questionnaire. The post SALSA program estimates below should be interpreted with caution given the low response rates.

Peer leaders learning objectives

At the start of the workshop peer leaders were asked ‘*When you think about your health and well-being, what would you most like to learn?*’ Peer leader’s responses, by sex and year group are provided in Table 5. There were notable differences between the two peer leader groups.

Among Year 10 peer leaders, more girls than boys reported wanting to learn how they could eat more healthy foods and more boys than girls wanted to learn how to be more physically active. Approximately two in five girls and one in six boys wanted to learn how to spend less time on their phone and playing e-games.

Among Year 8 peer leaders, more boys than girls reported wanting to learn how they could eat more healthy foods and more girls than boys wanted to learn how to be more physically active. Approximately two in five girls and over one third of boys wanted to learn how to spend less time on their phone and playing e-games.

Table 9. Prevalence of peer leaders learning intentions (%)

What I would like to learn	Peer leader year group			
	Year 10		Year 8	
	Girls (n=74)	Boys (n=39)	Girls (n=11)	Boys (n=14)
How I could eat more healthy foods.	41.9	30.8	27.3	42.9
How I can be more physically active.	35.1	53.8	54.5	21.4
How I could spend less time on my phone and playing e-games	23.0	15.4	18.2	35.7



Peer leaders learning outcomes

After delivering the four lessons to Year 8 students, peer leaders were asked ‘*What changes or differences have you made after the SALSA program?*’ Peer leaders’ responses are shown in Table 6, by sex. Almost half the peer leaders reported learning that small changes in diet and physical activity can influence their health. Overall, more girls reported dietary and physical activity changes than boys, while more boys reported reduced screen-time than girls (44.8% v 20.5%).

Table 10. Peer leader’s diet and physical activity learning outcomes post SALSA (%)

Learning outcome	Girls (n = 44)	Boys (n = 29)
Nothing I didn’t already know	15.9	24.1
I now know that making small changes to my eating and physical activity can have a positive impact on my health.	50.0	48.3
I eat more fruit every day.	43.2	34.5
I eat more vegetables every day.	40.9	17.2
I am eating healthier snacks.	43.2	17.2
I am being more physically active every day.	40.9	31.0
I know where I can be physically active in my local area.	40.9	20.7
I spend less time on my phone and playing e-games.	20.5	44.8

Changes in indicators of healthy eating and physical activity

Table 7 shows the mean daily serves of fruit and vegetables eaten by Year 10 peer leaders, frequency of eating breakfast daily, drinking sugar sweetened beverages, participation in physical activity and the proportion meeting recommendations for these indicators by peer leader year group, pre and post SALSA program. Among Year 10 peer leaders, there was a small increase in fruit and vegetable intake. However, the proportion meeting national dietary and physical activity recommendations was sub-optimal.

Similarly, the proportion of Year 8 peer leaders meeting national dietary and physical activity recommendations was sub-optimal. There were no post workshop data for Year 8 peer leaders.

Table 11. Peer leaders' dietary and physical activity habits pre-post SALSA (%)

Health-related lifestyle behaviour	Peer leader year group				NSW school students in Year 10 *
	Year 10		Year 8		
	Pre (n=115)	Post (n=73)	Pre (n= 26)	Post (n= 0)	
<i>Fruit consumption</i>					
Serves per day (mean ±SD)	2.1 (1.1)	2.5 (1.1)	2.6 (1.1)	-	n/a
Met recommendation (%) ¹	73.0	84.9	84.6	-	80.2
<i>Vegetable consumption</i>					
Serves per day (mean ±SD)	2.3 (1.2)	2.8 (1.5)	2.8 (1.5)	-	n/a
Met recommendation (%) ²	6.9	17.8	19.2	-	10.4
<i>Breakfast consumption</i>					
Days per week (mean ±SD)	4.8 (2.4)	4.8 (2.5)	4.9 (2.8)	-	n/a
Eats breakfast daily (%)	44.3	43.8	50.0	-	54.9
<i>Sugar sweetened beverage consumption (SSB)</i>					
Days per week drink SSB (mean ±SD)	1.9 (1.5)	2.2 (2.1)	1.4 (1.7)	-	n/a
Drink SSB daily (%)	2.6	8.2	3.8	-	9.4
<i>Physical activity participation</i>					
Days per week (mean ±SD)	4.1 (1.8)	3.8 (2.2)	5.3 (1.7)	-	n/a
Met recommendation ³	13.0	15.1	26.9	-	10.2

¹ Recommended daily serves of fruit = 2 serves; ² Recommended daily serves of vegetables = 5-6; ³ Recommended daily physical activity = 60mins

* Hardy LL et al, NSW School Physical Activity and Nutrition Survey 2015. ¹

SALSA Peer Leader Debrief Sessions

A debrief session was held post-delivery of the SALSA program to Year 7/8 students. The peer leaders completed the post SALSA questionnaire. They were also asked a range of questions to ascertain their peer leader experience. This feedback is used to inform the program, including the learning activities. In 2019-20 we updated the video 'Ryan's Goal' for the empowerment activity to an 8-minute animation, 'Simple Changes', co-designed with students.

The images below provide examples of student responses using Mentimeter platform to the debrief questions.



School Action Plan

1st



Water refill station

2nd



3 pointer

3rd



Juice station

What did you GAIN from being a peer leader?



Friends in year 7

leadership skills and teamwork

Gained leadership skills and more confidence when speaking in front of a class.

being tomato

Becoming friends with some of the year sevens and having them come to ask for advice outside of salsa

I gained leadership skills and also confidence

Lil yr7 friends

Communication, also became closer with year 7's, some followed me on tiktok. Also I learnt more as a leader and I now eat more fruit

How to eat Healthier

Peer-led lessons: Year 7/8 Students

Peer leaders in three schools and teachers in one school delivered the SALSA program to 817 students in Year 7 or 8. Students were asked to complete a brief on-line questionnaire at the start of the first (i.e., pre) and after the last SALSA lessons (i.e. post) on what they wanted to learn, what they learnt, and on indicators of healthy diet and physical activity participation.

Two hundred and ninety (35.5%) of Year 7/8 students completed the pre-questionnaire and 185 (22.6%) completed the post-questionnaire. The results below should be interpreted with caution given the low response rates.

Student learning objectives

Student's responses to the question '*When you think about your health and well-being, what would you most like to learn?*' are provided in Table 8. More girls than boys reported wanting to learn how to eat more healthy foods and more boys than girls wanted to learn how to be more physically active. One quarter of girls and one-fifth of boys wanted to learn how to reduce time on phones and playing e-games.

Table 12. Prevalence of students' learning objectives (%)

What I would like to learn.	Girls (n = 156)	Boys (n = 132)
How I could eat more healthy foods.	47.4	36.4
How I can be more physically active.	28.2	43.9
How I could spend less time on my phone and playing e-games	24.4	19.7

Student's learning outcomes

At the conclusion of the last SALSA lesson, students were asked '*What changes or differences have you made after the SALSA program?*' (Tick as many boxes as you like). Student responses are shown in Table 9, by sex.

Table 13. Students' diet and physical activity learning outcomes post SALSA (%)

Changes made after the SALSA program	Girls (n = 92)	Boys (n = 93)
Nothing I didn't already know	25.0	40.9
I now know that making small changes to my eating and physical activity can have a positive impact on my health.	54.3	36.6
I eat more fruit every day.	37.0	19.4
I eat more vegetables every day.	33.7	23.7
I am eating healthier snacks.	37.0	19.4
I am being more physically active every day.	42.4	32.3
I know where I can be physically active in my local area.	34.8	15.1
I spend less time on my phone and playing e-games.	12.0	9.7

Changes in indicators of healthy eating and physical activity

Table 10 shows the mean daily serves of fruit and vegetables eaten by year 8 students, frequency of eating breakfast daily, drinking sugar sweetened beverages, participation in physical activity and the proportion meeting recommendations for these indicators pre and post SALSA program. There were positive changes in student's dietary habits, in particular for fruit, vegetable and SSB consumption, however they were still not meeting national recommendations.

Table 14. Indicators of students' dietary and physical activity habits pre-post SALSA (%)

Health-related lifestyle behaviour	Pre (n=290)	Post (n=185)	NSW school students in Years 8*
<i>Fruit consumption</i>			
Serves per day (mean \pm SD)	2.2 (1.4)	2.4 (1.2)	n/a
Met recommendation (%) ^a	68.3	80.0	79.1
<i>Vegetable consumption</i>			
Serves per day (mean \pm SD)	2.1 (1.3)	2.5 (1.4)	n/a
Met recommendation (%) ^b	5.5	13.0	10.7
<i>Breakfast consumption</i>			
Days per week (mean \pm SD)	3.6 (2.8)	4.8 (2.5)	n/a
Eats breakfast daily (%)	28.3	44.3	64.4
<i>Sugar sweetened beverage consumption (SSB)</i>			
Days per week drink SSB (mean \pm SD)	3.1 (2.3)	2.6 (2.0)	n/a
Drink SSB daily (%)	16.2	9.2	10.4
<i>Physical activity participation</i>			
Days per week (mean \pm SD)	4.0 (2.2)	4.1 (2.1)	n/a
Met recommendation (%) ^c	21.0	17.9	12.8

^a Recommended daily serves of fruit = 2 serves; ^b Recommended daily serves of vegetables = 5-6; ^c Recommended daily physical activity \geq 60mins * Hardy LL et al, NSW School Physical Activity and Nutrition Survey 2015. ¹

Discussion

The COVID-19 pandemic impacted on the usual delivery of the SALSA program. However, it provided an opportunity for PERU to partner with the NSW Department of Education's Foundations.T4L unit to digitalise the programs for on-line delivery. The SALSA program in 2020 reached close to 1000 students from seven high schools located predominantly in socially disadvantaged areas.

The face-to-face SALSA Educator training workshops were run successfully and were well received by university students. The workshop content was relevant to their area of study and students felt confident in their ability to deliver the SALSA program to Year 10 high school students. Despite being unable to deliver the program in schools due to COVID-19, the university students still gained leadership, presentation, and teamwork skills from participating in the training workshop.

There appeared to be positive changes in the diet and physical activity habits of peer leaders and Year 8 students, in particular for fruit and vegetable consumption, after participating in the program. However, the proportion of students meeting the national dietary and physical activity recommendations remains sub-optimal, in line with NSW adolescent ¹. Breakfast skipping was identified as a local issue which may need to be addressed in the future through tailored school-based interventions. The low student response rate for completing the questionnaires pre and post must be considered when interpreting the data presented in this report.

Most of the Year 10 students who volunteered to be peer leaders were girls (65%), while for Year 8 peer leaders there were similar numbers of girls and boys. This was the first time that Year 8 students were trained as peer leaders, however this group did not go on to deliver the program to their peers so limited conclusions can be drawn on the success of this model. There were notable differences in learning intentions and outcomes between genders. Overall, girls were interested in learning how to eat healthier, and boys were interested in learning how to be more physically active. In general, more girls than boys indicated that they learnt or made changes to diet and physical activity following the SALSA program, while more boys reported reduced time spent on the phone and playing e-games.

Our process evaluation showed the digitalisation of the SALSA program and on-line delivery was successful and maintained fidelity to the original face-to-face program. Students were responsive and engaged during the on-line lessons, and qualitative post-lesson responses indicated that the majority of students felt nothing needed to be changed. While face-to-face remains the preferred delivery mode, the digitalisation of the SALSA program means it can be delivered in rural and regional NSW high schools.

Considerations for future programs

Given the low number of male university students who volunteered to become a SALSA educator, a potential future strategy is to advertise the program in disciplines with higher male intakes (e.g. science, engineering). Most of the Year 10 peer leaders were also girls, and future programs should consider how to engage boys in the program e.g. incentives, greater focus on physical activity. Strategies are also needed to increase pre and post questionnaire completion rates. Potential options include: using both paper-copy and electronic questionnaires accessed via QR code, and clearly explaining when the questionnaires are to be completed and the purpose of the questionnaire.

Recommendations for future on-line programs include:

- Limiting peer leader workshops to 20 students
- Having a dedicated staff member on site where possible, including a facilitator (if possible)
- A suitable room with access to a data projector, audio and smartboard
- Split the groups for activities before the workshop. Designate one student per group to submit work

- Need a strategy to assist students in keeping to break times
- Online tutorial training of school staff

Conclusion

The SALSA peer-led leadership program continues to be effective in empowering students to make healthier lifestyle choices. The key lesson learnt during the COVID-19 pandemic was the need to digitalise the SALSA program. The success of the digitalisation, in partnership with Foundations.T4L, and on-line delivery of the program were a major achievement during 2020. Students were engaged and interested in the on-line peer leader workshop, making this a feasible model for rolling out the program in rural and regional schools in the future.



SALSA Youth Voices

SALSA Youth Voices is an additional module offered to SALSA schools for SALSA Peer Leaders to further build leadership and advocacy skills. The activities in SALSA Youth Voices are linked to Stage 5 of the NSW Personal Development, Health and Physical Activity (PDHPE) (Strand: Healthy, Safe and Active Lifestyles) curriculum.⁴ A copy of the Stage 5 PDHPE outcomes linked to SALSA Youth Voices are located in Appendix 6.

Capturing student voice has been shown to be a powerful and effective tool for school planning and improvement.⁸ SALSA Youth Voices provides a platform for adolescents to share their ‘voice’ through collaboration with their teachers (i.e. adults) to develop a School Action Plan to increase physical activity or improve diet at their school. This approach ensures greater success of the changes students want in their school environment.

Providing students with an opportunity to voice their needs may have the added benefit of increasing student effort, participation and engagement in learning.⁹ The process allows students to realise that they can have an impact on things that matter to them at school,¹⁰ which may raise motivation and engagement.¹¹ Furthermore, it has been suggested that youth voice programs may foster a sense of inclusion, citizenship and school attachment among the student body,¹² and increase the involvement of disengaged and underachieving students.¹³

The structure of SALSA Youth Voices is shown in Figure 7 and comprises a one-day leadership workshop in Term 3 and an Action Day in Term 4. A teacher from each school is present for both days. The morning sessions of the workshop focus on leadership activities and discussions on what stops adolescents from being physically active and eating healthy foods. During the afternoon session students identify and plan an activity to promote or support healthy eating and physical activity in their school. Students then continue to work on these plans to implement their School Action Plan which they present at the Action Day in Term 4 (approximately 12 weeks later).

Figure 6. Structure of SALSA Youth Voices



SALSA Youth Voices Leadership Day Workshops are usually delivered face-to-face at the community centre of a professional sports club (Greater Western Sydney Giants AFL club) with multiple schools attending. However, in 2020 the COVID-19 pandemic impacted on the usual delivery of the program and on the number of schools and students who normally participate. The pandemic situation required the digitalisation of the leadership workshop so that it could be conducted

on-line via Zoom using the schools learning platform (i.e. Google Sites, MS Teams or Google Docs) and other interactive on-line learning tools (e.g. Mentimeter, Padlet and Kahoot).

We continued our partnership with Foundations.T4L, to deliver the on-line version of the SALSA Youth Voices leadership workshop. The main change was the omission of the middle section comprising fitness testing and AFL activities. This was replaced with a game of Snatch, a school environment scan and other leadership activities.

Leadership Day

Fifty-five SALSA Peer Leaders from five high schools participated in the on-line leadership workshops. Three-quarters of students rated the leadership workshop as excellent, and 22% as average. Students completed a brief questionnaire at the end of the workshop (see Appendix 5). Table 11 shows responses to the question “*Why did you volunteer to be part of the leadership day?*” (*Tick as many that apply*). The most common reason given for participating was because they wanted to develop or strengthen leadership skills, and over half the students wanted to apply these skills to plan and implement healthy eating and physical activity activities in their school.

Table 15. Reasons for being involved in the leadership day (%)

Reason	All (n=37)
I am interested in how to lead a healthy lifestyle.	46%
To help others to be healthy	41%
Because I would like to develop or strengthen my leadership skills.	73%
I want to apply my skills to plan and implement healthy eating and physical activity activities in my school.	54%
To meet people and make new friends	22%

Other reasons peer leaders stated for participating in SALSA Youth Voices included:

To gain experience and to be involved in new activities that can benefit me in the future (Boy)

To enhance my leadership skills and confidence (Girl)

To make a positive change in the school (Girl)

I would like to experience and help people (Boy)

Three-quarters of students rated the leadership workshop as excellent and 22% as average. Youth Voices was designed to give peer leaders an opportunity to build on their leadership skills, and to enable them to develop an action that would enhance healthy eating and physical activity in their school. Table 12 shows which skills students reported gaining from participating in the leadership day. The most common skills students reported building through participating in the leadership workshops were communication and teamwork.

Table 16. Perceived skill building (%)

Skills	Leadership workshop (n = 37)
Leadership	60%
Advocacy	24%
Communication	81%
Problem solving	43%
Increased confidence	41%
Teamwork	81%

Students are provided with a School Action Plan template to guide the development of their idea (Appendix 7). Almost 80% of students reported the template to guide the design of a School Action Plan was very useful and 20% were neutral about its usefulness. Three-quarters of students reported that the leadership workshop activities were very helpful for planning their School Action Plan (25% reported a little helpful) and 54% were very confident (43% fairly confident) the School Action Plan could be implemented.

School Action Plans

Student ideas to promote healthy diet and physical activity in their school included:

- Shelters for handball and volleyball courts
- Synthetic surface replacing a grass sports oval
- Develop a sports club
- Paint playground handball and volleyball courts
- Water refill stations

The Mount Druitt Medical Practitioners and the Hills Doctors Associations, provided each school with \$500 to help students implement their School Action Plan.

SALSA Youth Voices Action Day, 2021

COVID-19 restrictions prevented the Action Day event from taking place in Term 4 2020. The Action Day was held in Term 1 2021 in partnership with the NSW Department of Education. Students were given the opportunity to showcase their School Action Plans to a forum of education and health professional at Rooty Hill High School on Wednesday March 31, 2021. To recognise the outstanding student contributions, all participating schools were awarded trophies.

Student Action Plans presented included:

- A plan to paint new handball courts to engage students in more physical activity
- To install water refill stations on campus to encourage students to drink more water
- The replacement of current uneven sporting grounds with artificial turf

To ensure the ideas that students generated during the leadership workshop would be relevant, students from each school were asked to produce a short (5 minute) video or presentation about their School Action Plan. Students were offered filmmaker support from Foundations.T4L

(<https://t4l.schools.nsw.gov.au/resources/teaching-and-learning-resources/the-student-filmmaker.html>).

The student presentations/videos will be uploaded to the Prevention Research Education Unit website <https://salsa-triple-a.sydney.edu.au/> and the Student Voices section of the NSW Department of Education website (<https://education.nsw.gov.au/student-wellbeing/student-voices>).



Ms Cawsey (Centre), Principal, Rooty Hill High School, delivering an opening address



Nepean CAPA High School SALSA Peer Leaders and Coordinator



Daniel McAlary, Zoe Van-Stolk, Mark McLean and Smita Shah



F Karpouzis, Z Van-Stolk, Dr R Itzwerth, Dr KS Lim, A/ Professor SShah, D McAlary, and L Di Mento

SALSA Youth Voices has demonstrated success beyond the program, as observed by Loretta Di Mento, Deputy Chair of WSLHD Board, “a number of former students and staff return[ed] in new roles as program leaders. It is clear that strong community ties are being established by the SALSA program.”

The President of Mt Druitt Medical Practitioners Association, Dr Kean-Seng Lim, and former president Dr Hani Bittar emphasised the importance of leadership and student voices as a driving factor for change in their community. The NSW Australian Medical Association also showed their support of the students by generously funding a delicious and healthy COVID-safe lunch.

The importance of the day was highlighted by Brenda Quayle, Principal of Erskine Park High School, who said “We are so grateful for our involvement in SALSA Youth Voices, which provides great opportunities for our students to advocate for healthy lifestyle choices.”

Conclusion

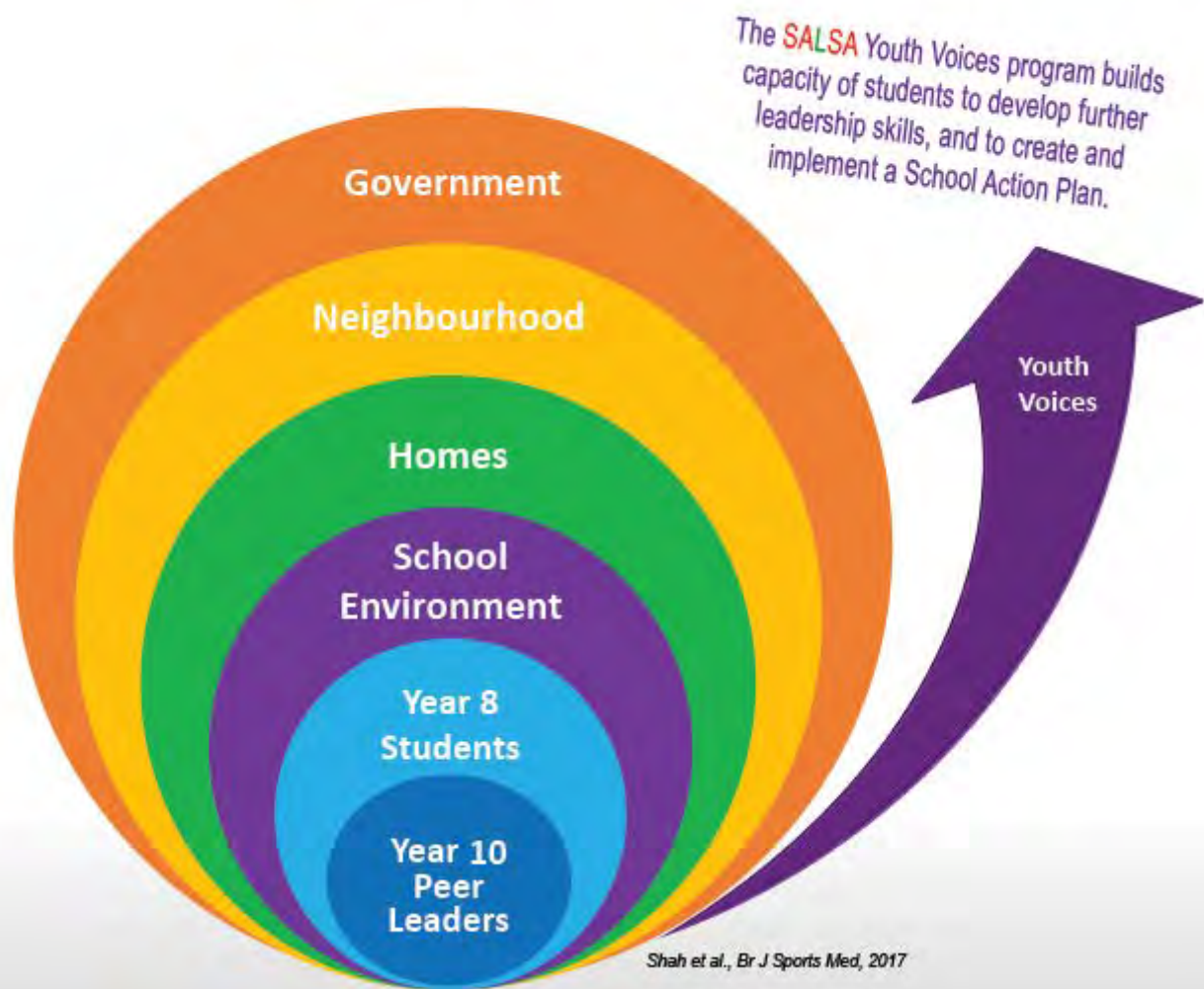
The digitalisation of the SALSA Youth Voices leadership workshop and on-line delivery was successful in allowing students to build and strengthen leadership skills and to develop their ideas on how they could encourage healthy eating and physical activity in their schools. Students also developed technology skills, including the use of Zoom, Microsoft Teams or Google Classroom.

Although the pandemic impacted on students implementing these ideas in 2020, most students were confident that their ideas would be implemented in 2021. The Action Day was a success with both students and the audience. SALSA Youth Voices provided a vehicle for young adolescents to explore leadership skills in a safe environment with the support of their school and funding from the Mount Druitt Medical Practitioners Association.

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THE **SALSA** PROGRAM MODEL





SALSA

Students As LifeStyle Activists