

Enhancement of Cancer Education Interventions with an Electronic Audience Response System (ARS)

contact person

Linda Burhansstipanov, MSPH, DrPH (Cherokee Nation of OK)

Executive Director

Native American Cancer Research

3022 South Nova Road

Pine, CO 80470-7830

Phone: 303-838-9359; Fax: 303-838-7629

Native Cancer Survivor's Support Network: 1-800-537-8295

Web Page: <http://NatAmCancer.org>



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1

Partners / Co-investigators



Linda U. Krebs, RN, PhD, AOCN, School of Nursing, University of Colorado Health Sciences Center, Denver, CO



Eduard Gamito, BS, University of Colorado Health Sciences Center, Denver, CO



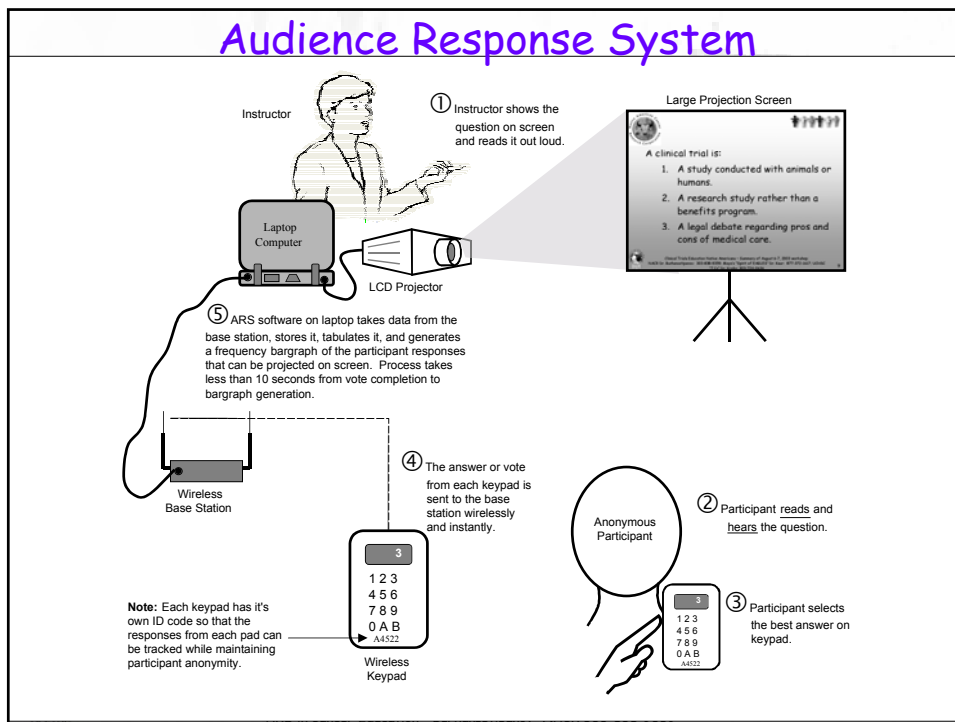
Alice Bradley, MA, NCI's Rocky Mountain Cancer Information Services








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2





The Audience Response System

-  computer-assisted tool consisting of hand-held keypads linked wirelessly to a computer system and an audiovisual display
-  Keypads allow participants to respond:
 -  anonymously
 -  in real time
 -  and to receive grouped results for "selected items" (demographics, posttest)

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Highlights as to how we got to where we are



A lot of workshops where people have to leave early (to get to next session, pick up the kids, etc.) = incomplete post-workshop evaluation



A lot of time and hassles dealing with paperwork associated with collecting demographic information, pre- and post- workshop knowledge as required for ongoing grants.



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5

Highlights (cont.)



7 Cs (PI: Linda Krebs) project learned about ARS from co-investigator, Gamito, early summer of 2003



7Cs rented the equipment for 2 trainings/conferences/events during summer 2003



"Clinical Trials Education for Native Americans" (Aug 7-8, 2003) Training



Colorado Cancer Coalition Conference (August 10-11, 2003)



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6



Highlights (cont.)



7Cs co-investigators calculated amount of staff time to review, load, perform data quality management procedures, transfer data, summarize data



Native American Cancer Research purchased ARS system October 28, 2003



used it within 36 hours for GENA at tribal college



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7

Pricing information



contact: Jason Adcock
Option Technologies Interactive
4399 36th Street S.W.
Orlando, FL 32811
407-872-3333 fax: 407-872-3330
email:
jadcock@OptionTechnologies.com



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8



Pricing information



NACR's initial investment = \$17,850



1 base station = \$1,160

75 keypads @ \$178 each

software license and upgrades for
2 years @ \$499

Stormcase with foam inserts
~\$120

data card @ \$170



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9

Pricing information



NACR's and 7 Cs subsequent
investments



2 switchers, LCD, laptop, extension
cords, packing bags for
cords/wires, backup of data card



Shipping Costs

for 1 case 1 day 1 way

Fed Ex = \$230

for 1 case 3 day economy 1 way

Fed Ex = \$80



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10



Pricing information



To rent equipment and personnel for one day for Native Clinical Trials training (24 keypads) averaged \$1500



NACR documented costs and faculty time "saved" for workshops beginning October 29, 2003.



NOTE: NACR implements an average of 2 workshops or trainings a month



The equipment paid for itself by July 21, 2004






Use of ARS

1. Demographic data collection
2. Pre- and post-workshop knowledge assessment
3. Audience polling: topical/opinion/choice
4. Educational leveling
5. General session evaluation



Data Processes




-  ARS software allows for generation of cross tabs and descriptive data summary
-  Data can be transferred to excel Instructor Grade Report or Question Analysis Report within minutes of the completion of the education session
-  Excel data transferred to Access, SUDAAN, SAS, SPSS within minutes



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13

How the ARS has been used since 10-2003

-  "Genetic Education for Native Americans" [R25 HG01866]
-  "Clinical Trials Education for Colorado Providers" [R25 CA82714]
-  "Clinical Trials Education for Native Americans"



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14



How the ARS has been used since 10-2003



"Native American Palliative Care"
Curriculum



"Get on the Path to Health" (cancer
prevention and control)



breast



cervix



colon



lung



prostate



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15

How the ARS has been used since 10-2003



Demographic/ pre-post Evaluation for
breakout sessions during



CO Cancer Coalition Conference
August 2004



Spirit of EAGLES 6th National
Cancer conference (September
2004)



Society for the Advancement of
Chicanos and Native Americans in
Sciences (SACNAS) (October
2004)







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16



How the ARS has been used since 10-2003

-  CO Cancer Coalition "debate" regarding 501(c)(3) options (07-24-04)
-  Spirit of EAGLES Medical Students Cancer Workshops (concurrent all day workshop, 09-11-04)
-  Latino Cancer Education Theater Production (10-10-04)
-  "Native American Cancer Education for Survivors" (NACES) Working Meeting (11-11-04)



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17

Conclusions: ARS

- has been a cost effective investment
- has saved time and energy of faculty
- has been used in diverse settings
- has been used for diverse topics
- has been used with workshop participants of diverse backgrounds (community members, researchers) and been well accepted
- provides ease for data analysis



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18

