

Critical and Creative Thinking in Audiovisual Production: *Principles and Practices to Improve Health and Science Communication*

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April 30, 2018

Agenda

- Personal introduction
- Critical and Creative Thinking MA (CCT)
- Research project at Dana Farber Cancer Institute
- Challenges with engaging Latinos in health care
- Using CCT principles & practices to engage patients
- CCT insights for audiovisual production
- Conclusion

Personal Introduction

- Worked as an audiovisual (AV) producer for 15 years
- Came to the US for language skills and my graduate degree
- Why CCT appealed to me:

“Provides its students with knowledge, tools, experience, and support so they can become constructive, reflective agents of change in education, work, social movements, science, and creative arts”

*Critical and Creative Thinking MA
Umass Boston Website, 2018*

Critical and Creative Thinking MA

- I expected CCT to be:
 - A degree to help me learn how to become a critical thinker
 - A degree to help me understand creativity
 - A degree to help me identify how to apply critical thinking in video production

CCT seemed to be very relevant for audiovisual production in an era of reality TV, 'fake' news, and the enormous amount of new content on websites like YouTube and Facebook.

CCT Principles

- Focus on one thing at a time
- Maintain an open mind
 - **Avoid biases and value judgements**
- Gather, understand, and analyze information
- Look for unusual connections
- There are no right or wrong answers

***Discipline and rigor are required to keep
critical thinking***

Taking Yourself Seriously
Taylor & Sxteiter 2012

CCT Practices

- Think about thinking
- Find multiple sources and different perspectives
- Find strengths and weaknesses
- Break complexity into simplicity
- Ask “***What If***” every time

Daily writing is crucial to make ideas real plans

Taking Yourself Seriously

Taylor & Sxteiter 2012

CCT Degree Format

- Engage in diverse subjects through high-quality classes
 - **Metacognition, critical thinking, epidemiology and others**
- Independent study
- Tutors instead teachers
- Applied in the real word

My Research Project

- Research Question:
 - What CCT principles and practices can be applied to improve videos intended to communicate complicated health and science information?
- Research Audience:
 - My research is designed for AV producers, doctors, and scientists who want to use videos to explain science and health information to the general public

This presentation discusses both the project that I used as a case study and how I tried to answer my research question

EL CENTRO Details

Engaging Latinos in the Center of Cancer Treatment Options

Research Motivation

Latinos with incurable cancer have overly optimistic expectations of prognosis, and often receive palliative chemotherapy without understanding that it is not a cure. -EL CENTRO Grant Proposal

EL CENTRO Team

- DF/HCC: Dr. Deborah Schrag, Dr. Andrea Enzinger
- UMass: PhD. Ana Lyndsay
- Grant from National Institutes of Health (NIH)

Randomized Control Trial (RCT)

- Testing the effectiveness of educational materials
- Two cohort groups of 116 patients
- Patients with colorectal and pancreatic cancer



Dana-Farber/Harvard
Cancer Center
dfhcc.harvard.edu



EL CENTRO Trial Materials

- Remake 5 English videos
- Produce 5 new Spanish videos
- Produce informational booklets in both languages

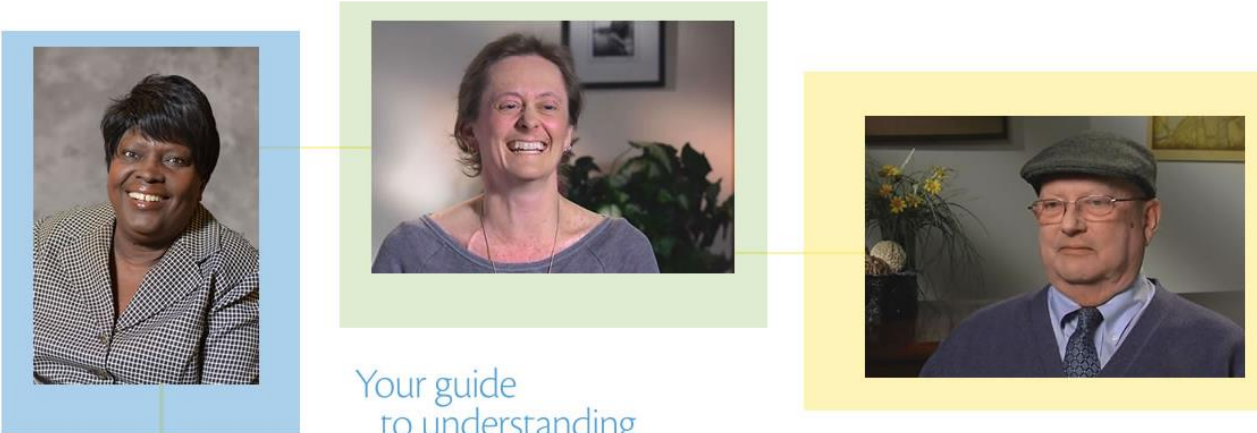
- Develop a poster to showcase the EL CENTRO research project at symposia & conferences

EL CENTRO Existing Materials

- DFCI already had existing educational materials in English to assist patients and caregivers understand cancer treatment
- **YouTube link to sample video in ZOOM chat bar**

Chemotherapy
for metastatic
colorectal cancer

[HOME](#) [VIDEO](#) [BOOKLET](#) [ABOUT](#) [CONTACT US](#) [LOGOUT](#)



Your guide
to understanding
FOLFOX and FOLFOX + bevacizumab

CCT Analysis of DFCl Videos

Critical Concern

1. Too many doctors talking down to the patient or in dry clinical language
2. Information that is too complicated or technical is hard to engage with
3. Videos produced from the doctor's perspective
4. Culturally neutral

Creative Solutions

1. Get patients to tell their story with emotion
2. Having patients explain technical details helps make the concept easier to grasp
3. Video's produced from the patient's perspective
4. Culturally targeted and relevant

EL CENTRO - Booklets

- Dr. Teresa Bejarano MD is in charge of this project
 - I was part of the translation and design teams
- Booklets will be presented along with the videos to study participants
- Handout copies are available for you to review if you choose



EL CENTRO - Poster

- As part of the research side of this project, we presented our work at a recent symposium
- We showcased the research by displaying this poster last summer in a symposium with for undergraduate and graduate students
- This poster is also being presented at a variety of conferences this year and will be adapted as more research results are finalized

University of Massachusetts Boston – Dana-Farber/Harvard Cancer Center U54 Cancer Research Partnership

EL CENTRO: Engaging Latinos in the Center of Cancer Treatment Options

Paula Avila*, Dr. Ana Lindsay*, Athalia L. Lopez*, Keysha Miralda*, Dr. Deborah Schrag**, Dr. Andrea Enzinger**, Christine Cronin**, Teresa Bejarano ***
* University of Massachusetts Boston ** Dana-Farber Cancer Institute *** Boston Medical Center

Methods/Materials

Systematic Lit Review and cognitive interviews

Develop suite of chemotherapy educational videos and booklets

Randomized Control Trial (RCT)

Background

Patients with advance incurable cancer need effective communications means to help them in their understanding of prognosis and treatment options. Unfortunately, the quality of patient-provider communication is sub optimal for ethnic minorities with advance cancer (1), particularly Latinos. Latinos are the largest minority group in the US.; however, cultural and idiomatic barriers limit their communications with health providers. For instance, nearly 40 % of Latinos have limited English communications proficiency (2) and 60 % have low health-literacy (2). These barriers compromise Latino's ability to understand important information about cancer, providers-care services, and medical treatment options.

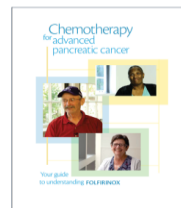
Hypothesis

We anticipated that high-quality information with cultural nuances, such as language would improve communications outcomes like treatment understanding, communications satisfaction, and the patient-physician relationship. Our hypothesis is that developing communications means with cultural focus may translate into downstream improvements in health-care services for Latinos and other minorities in the future.

Qualitative research

- Literature review: communication & information needs/preferences of Latinos regarding advanced cancer, chemotherapy, & prognosis
- Focus groups: Characterize communication experiences & needs of Latino adv cancer patients & CG's regarding diagnosis, chemotherapy, & prognosis
- Cognitive interviews: have target audience (Latino patients) review & critique existing intervention.

Intervention Development



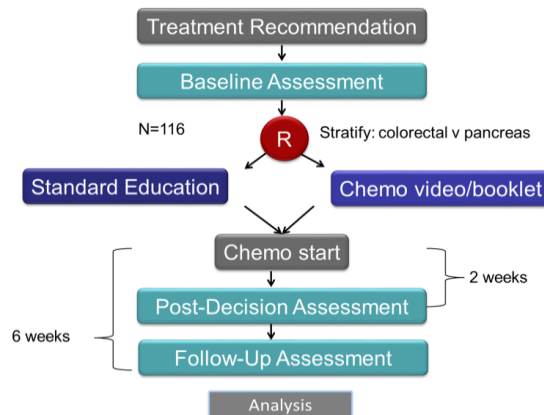
Sample Video: www.chemovideo.org

- Revise English-language tools: booklets & videos
- Editing new interviews
- Develop Spanish-language tools: booklets & videos
 - Translation of booklets & video scripts using cross-cultural adaptation (review by native Spanish speaker from Ecuador, Colombia, Honduras, República Dominicana y España.
 - Patients Scouting
 - Patient's filming: We filmed patients at Dana Farber Cancer Institute (DFCI), DFCI Lawrence, Moffitt Cancer Center and Boston Medical Center.
 - Medical team: 2 doctors,, 2 social workers, 1 nurse,
 - Editing script writing
 - Postproduction /First draft revision
 - Final editing

Intervention adaptation

Key informant interviews (stakeholder engagement)
Analyze/synthesize findings of focus groups, lit review, cognitive & key informant interviews to inform adaptation process
Revise English-language tools: booklets & videos
Develop Spanish-language tools: booklets & videos

Study Scheme



Current Progress

- Booklets in Spanish first draft for printing
- Filming done: Total: 11 patients, 2 doctors, 2 social workers, and one nurse.
- 10 videos in Spanish about the following treatment option: FOLFOX, FOLFIRI, FOLFIRINOX, GEMCITABINE, and GEMCITABINE + NAB-PACLITAXEL

Results/Conclusions

*This is an ongoing study.
All findings are preliminary.*

- Novel Intervention targeted to needs of Latinos
- Qualitative understanding of regarding Latino patient/caregiver communication needs
- Publications and several manuscripts from RCT

Future Work

- Future funding: apply to NCI/AHRQ/PCOR or ACS to extend intervention to other cancers, or dissemination implementation research
- New avenues of investigation for UMB & DF/HCC researchers.

Literature Cited And Acknowledgements

References

- Fiscella, K. (2003). Assessing Health Care Quality for Minority and Other Disparity Populations.
- Wilson, E., Chen, A. H., Grumbach, K., Wang, F., & Fernandez, A. (2005). Effects of limited English proficiency and physician language on health care comprehension. Journal of general internal medicine, 20(9), 800-806.

Acknowledgements:

- The UMass Boston Dana-Farber/Harvard Cancer Center Partnership Summer Program is funded by a grant from the National Cancer Institute (1U54CA156734-06A) Dana Farber Cancer Institute
- University of Massachusetts
- National Cancer Institute

EL CENTRO – Revised Videos

- YouTube link to sample video in ZOOM chat bar
- Designed for:
 - Patients with colorectal and pancreatic cancer
 - Patients making decisions about chemotherapy treatment
 - Caregiver and family members
 - RCT will show these videos in 16 hospitals across the US as part of the EL CENTRO research program

*My CCT research uses this as a case example of how scientists and AV producers use **Critical and Creative Thinking** concepts in video production*

CCT Concepts for AV Producers

CCT Principles

- Help audiences to understand complex and technical information
- Audience misunderstanding can guide content creation
- Do not expect to answer every patient question
- Sight is visual and concrete; perception is individual and interpretive

CCT Practices

- Think as learner rather than as an expert
- Question the audience's learning needs and give them what they want
- Always strive for small and simple answers
- AV producers should try to design videos from the viewer's perspective

Personal CCT Take-Aways

- I want to focus my career as AV producer in health science and other educational videos
- I want to make videos that focus on being informative and preventative. I hope to help the general population make positive life decisions
- I want to make health educational videos that use features from entertainment shows to deliver complex and highly technical information in more engaging ways
- I want to use my love for photography and looking at the real world through a camera lens to change how my audience sees the world around them

Concluding Thoughts

- Health educational videos are more engaging when they include patient's experiences in addition to medical information
- Emotional content grabs an audience's attention and helps them absorb more technical details
- AV producers involved in health educational videos should see encouraging patients to make better decisions for themselves as a goal
- Creativity is not only for artists! Patients can also be creative as they try to solve problems in their healthcare treatment
- Critical thinking and creativity are concepts and skills that everyone should develop

References

- Wilson, E., Chen, A. H., Grumbach, K., Wang, F., & Fernandez, A. (2005). Effects of limited English proficiency and physician language on health care comprehension. *Journal of general internal medicine*, 20(9), 800-806
- Boston, U. of M. (2018). Critical and Creative Thinking MA. Retrieved from <https://www.umb.edu/academics/caps/degree/creative-thinking>
- Grantome. (2017). EL CENTRO: Engaging Latinos in the Center of Cancer Treatment Options. Retrieved from <http://grantome.com/grant/NIH/U54-CA156734-07-6981>
- Taylor, Peter J and Szeiter, J. (2012). *Taking Yourself Seriously: Process of Research and Engagement*.
- Costa, A. L., Brandt, R., Resnick, L. B., Hay, L., Edwards, J., Marzano, R. J., ... Baron, J. (2001). *Developing Minds* (3, illustr ed.). Association for Supervision and Curriculum Development, 2001.
- Olson, R., Barton, D., & Palermo, B. (2013). *Connection: Hollywood Storytelling Meets Critical Thinking*. Retrieved from http://www.buildingclimatesolutions.org/files/290201_290300/290208/olson-et-al-2013_connection-e-book.pdf

Thank You!!!

- Questions welcome

- For more information about my presentation or the EL CENTRO program please contact:
 - **Paula Avila**
 - **Email**
 - **Phone**

Additional Materials

□ Video 1

https://youtu.be/S4W_igCLU0U

□ Video 2

<https://youtu.be/np98ZBxg7rA>