



**Communication in  
Construction (CiC)**

# **Bootcamp Proposal**

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**For Fall 2020**

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**Presented by: Amy Powell, GTC**

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# Bootcamp Proposal

## Communication in Construction (CiC)

There is a resounding need for communication skills within the construction industry. Considering the majority of our workday consists of communicating, transferring information and motivating our teams, this skill has long sense been overlooked as a necessity and prerequisite for our industry.

***“Communication has long sense been overlooked as a necessity and prerequisite for our industry”***

This proposal will cover the suggested materials and associated research to provide five different bootcamp sessions at 3-hours each to seniors within your Construction Management program at CSU. The content will include various soft skills including teamwork, leadership, public speaking and conflict management and how communication contributes to each of these skills.

I have worked in the construction industry for over 15 years in varying managerial roles. Throughout my experience I realized the lack of training opportunities as well as the lack of understanding of the importance of these soft skills amongst my colleagues. Therefore, I have sense transitioned into a training role, to further research, gather and develop this information to effectively fill the gap between necessary soft skills and enough construction experience to effectively present this information to industry members.

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# 1.1

## COMMUNICATION IN CONSTRUCTION

### Needs Assessment

Department of Construction Management  
Colorado State University

#### TO WHOM IT MAY CONCERN,

As an active member of the construction industry, I have attended a wide variety of conferences geared towards the construction industry and have recognized a trend in responses related to desirable attributes of people starting their careers in construction. One such conference asked industry panelists what they felt was lacking in those who are just entering the construction industry. The responses overwhelmingly pointed to soft skills, communication and accountability (Presented at Classroom to Careers Summit by Jeffco Public Schools). This was also brought up in the Fall 2018 Professional Advisory and Development Board for the Construction Management program at CSU. Industry professionals echoed that soft skills are the biggest improvement area needed within the department. This has also recently been mentioned in the ArvadaWorks Talent Pipeline collaboration which helps connect industry to education and community partners.

In addition to the local discussions regarding the need for increased soft skills, there have been noteworthy publications that support this need as well. Baharudin, Egbu's work (as cited in Farooqui, Ahmed, Saqib, 2011) stated that "of the 75 types of management skill and knowledge, the six most important are leadership, communication (oral/written), motivation of others, health and safety, decision making, and forecasting and planning" (p.10). Educating soon to be graduates on relevant soft skills not only has the potential to contribute to the success of a construction project and higher retention rates within a company but also sets the individual up for success in that it reduces frequent stressors commonly found within our industry. The main contributors to stress within the construction industry have been identified as: a lack of feedback, poor communication, inadequate staffing, too much work, conflicting demands, ambitious deadlines and pressure (CIOB, 2006).

Construction is a "people business". Although we are frequently working with our hands or managing schedules, budgets and materials, each of these inherently involve other people as well. When we are informed about how people communicate and how we can communicate more effectively, our productivity goes up, our stress levels go down and our project teams start to work more efficiently. Communication in construction will hit on varying levels of communication from how someone perceives us based on our handshake to how we can most efficiently work within a team, have constructive disagreements as well as how to lead a team to motivate our coworkers, team members and ourselves.

Considering the majority of graduates from the Construction Management program transition into leadership and management positions with the industry, these skills become even more critical. And, although soft skills have the potential to be learned overtime through years of experience and mentoring, it is proactive to introduce these concepts early on in ones career to set them up for success in lieu of ‘throwing them in to see if they can stay afloat’. Therefore, this instructional event is recommended to fill this need and prepare graduating students to more readily enter the workforce. This will cover five different sessions at 3-hours each to cover the proposed content. It is recommended that students are in their 3<sup>rd</sup> and 4<sup>th</sup> year and enrolled in the Construction Management program who are about to enter into the construction industry.

I appreciate your consideration of this request and I look forward to hearing back with you on additional steps to proceed with implementing this bootcamp.

Respectfully,



Amy Powell

Director of Training and Outreach

# 2.1

## COMMUNICATION IN CONSTRUCTION (CIC)

### Task Analysis

#### GOALS

The goals of the program were carefully considered as the design and construction of a building takes strong leadership to initiate and carry-out. Leadership intrinsically includes communication and interaction with others. Therefore, the main goals of the bootcamp have been identified as the following;

- To educate students on the different types of communication as they relate to the construction process and how to determine what type of communication is best in different and difficult situations.
- To educate students that effective leadership within construction includes knowing how to interact with people and how this indirectly impacts the success of a construction project.
- To prepare students for the frequent difficult conversations inherent to high stress - high reward situations and how to best approach or handle conflict during these difficult discussions.
- To improve the confidence and ability of entry level construction industry members of how approach and carry on challenging conversations while choosing the best form of communication to maintain professional relationships within the industry.

#### BOOTCAMP TASKS

The tasks necessary to achieve the goals of the program were broken out as portrayed on the attached task analysis document. The tasks build upon each other as prerequisites to get to a higher level. Therefore, the sequencing of the courses will be considered based on starting at the base of the visual ultimately leading to the communication skills and abilities of a leader.

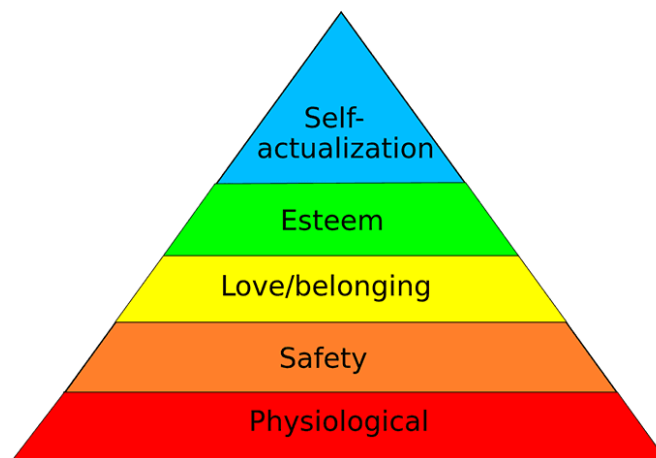
The task analysis graphic represents leadership as the ultimate destination within the hierarchy. Leadership includes technical knowledge on how a building is built, scheduled or budgeted but leading others who acquire these strengths is just as, if not more important. "If certain conditions are met, the people inside an organization feel safe among each other, they will work together to achieve things none of them could have ever achieved alone" (Sinek, 2017, p. 17). Competencies and skills of a leader are not a simple timeline of events or easily achieved. Although each and every one cannot be listed out to form a perfect timeline for one to become a leader, they can be broken in to larger general categories that can include snippets of

information to provide a foundation or jumping off point to provide this understanding.

Working backwards starting from leadership, a leader must be able to set and communicate a vision or goal. “Authoritative leaders state a vision, set standards, and let people know how their work is furthering the group’s goals” (Golman, 2017, loc.168). Additionally, leaders need influence which requires empathy, but also an understanding of how to communicate with others and public speaking to effectively communicate this vision. With influence comes trust and responsibility within a team.

This brings us to the next step listed on the attached chart, teamwork. One cannot manage specific skills or tasks without knowing specific information about that task or skill. Similarly, one cannot lead a team if they have not successfully worked within a team. Breaking down the components of a team, people have to know how to build influence and trust, how listen and communicate to work collaboratively with others and how to engage in productive conflict. “If we don’t trust one another, then we aren’t going to engage in open, constructive, ideological conflict. And we’ll just continue to preserve a sense of artificial harmony” (Lencioni, 2002, p.166).

To be a productive member of a team, basic personal needs must be understood and met. As shown below, using Maslow’s Hierarchy of Needs, the need for belongingness is the third tier, (out of five) in his triangle. This tier includes friendship, intimacy, trust, acceptance and receiving and giving affection and love. This also includes affiliating and being part of a group. When a deficit need has been more or less satisfied it will go away and our activities will become habitually directed towards meeting the next set of needs that we have yet to satisfy. Therefore, a basic understanding of self-awareness and awareness of others is needed. As quoted by John Mayer (as cited in Golman, 1994) “Self-awareness, in short, means being ‘aware of both our mood and our thoughts about that mood’” (p. 47). Understanding why we communicate, our natural tendencies and instincts to communicate, as well as information about our brain and body during communication can help us achieve this higher level within that pyramid. Therefore, self-awareness and awareness of others falls at the bottom of the pyramid chart that builds up to leadership.



(McLeod, 2017)

## SAMPLE COURSE OBJECTIVES

Based on the above information, the consideration of goals for the program and possible course outlines that will still be determined, the following are sample objectives of one of the potential courses:

### Non-Verbal Communication Course:

Objective: At the end of this 3-hour course, students will be able to better understand an interlocutor's non-verbal communication as well as how to use non-verbal cues to support their own verbal message while communicating in a professional setting.

Objective: Students will be able to identify and list different non-verbal cues and their meanings during their peer's final capstone presentations.

# 2.2

## COMMUNICATION IN CONSTRUCTION (CIC) CONTENT

### CONTENT INFORMATION AND SUMMARY

Communication in leadership and teamwork is determined as the most effective content for this bootcamp. With the amount of people participating on a construction project as well as the inherent challenges throughout the process, difficult conversations are inevitable and necessary. How to approach these conversations as well as what form of communication that should be used based on the situation is critical to maintaining relationships and ultimately the success of the project.

The structure of the course has been considered from the task analysis presented in section 2.1 of this proposal and with the following considerations. The design and construction of a building takes strong leadership to initiate and carry-out. Leadership intrinsically includes communication and interaction with others. Although it also includes technical knowledge on how a building is built, scheduled or budgeted, leading others who acquire these strengths is just as, if not more important. This highlights the fact that knowing how to work as a part of a team is necessary in order to effectively lead a team. Teamwork requires a mature level of communication to be effective. Teamwork skills include but are not limited to trust, influence, listening, time awareness, the propensity of conflict and how this can be approached to maintain the trust and momentum within a team. Each of these skills relate to one another in that we need to have self-awareness, awareness of others and a basic understanding of how trust is built, why conflict arises and how we may be able to actively take part in the results. Therefore, the structure and order of the content will be as follows:

Non-Verbal Communication (Self Awareness) □ Trust and Teamwork □ Leadership and Conflict □ Speaking in Public (as a leader)

Assessment of the participants will be determined in a number of ways. Participation will be essential in order to complete the assignments and pass the class. This will be done through working assignments and quizzes that will be completed during the class after large class discussions on specific topics. A leadership match game has been developed to verify understanding of leadership styles that are most appropriate to use in construction specific situations. Additionally, a simulated conflict activity is prepared to witness and experience a conflict and the different communication styles used to manage the situation. The largest assignment will be a simulation. Students will be given a challenge with specific information about a project where a project is in jeopardy of losing a large amount of money. A homework assignment includes written communication in the form of an e-mail to the leadership group of this project requesting a meeting to discuss further. They will then need to prepare and submit a plan of action of how

this meeting will be conducted. At this point, they will sit down with three executive industry members acting as the leadership group and communicate this difficult information while attempting to keep as much of the money as possible (since they are not responsible for the change) while trying to maintain relationships with all parties equally. The industry members will be trying to initiate conflict to test the students learned content of calming others in heated discussions.

Below is the proposed syllabus for the course, a sample of the instructional plan for the non-verbal course as well as the assessments which include a quiz and homework for this course as well.

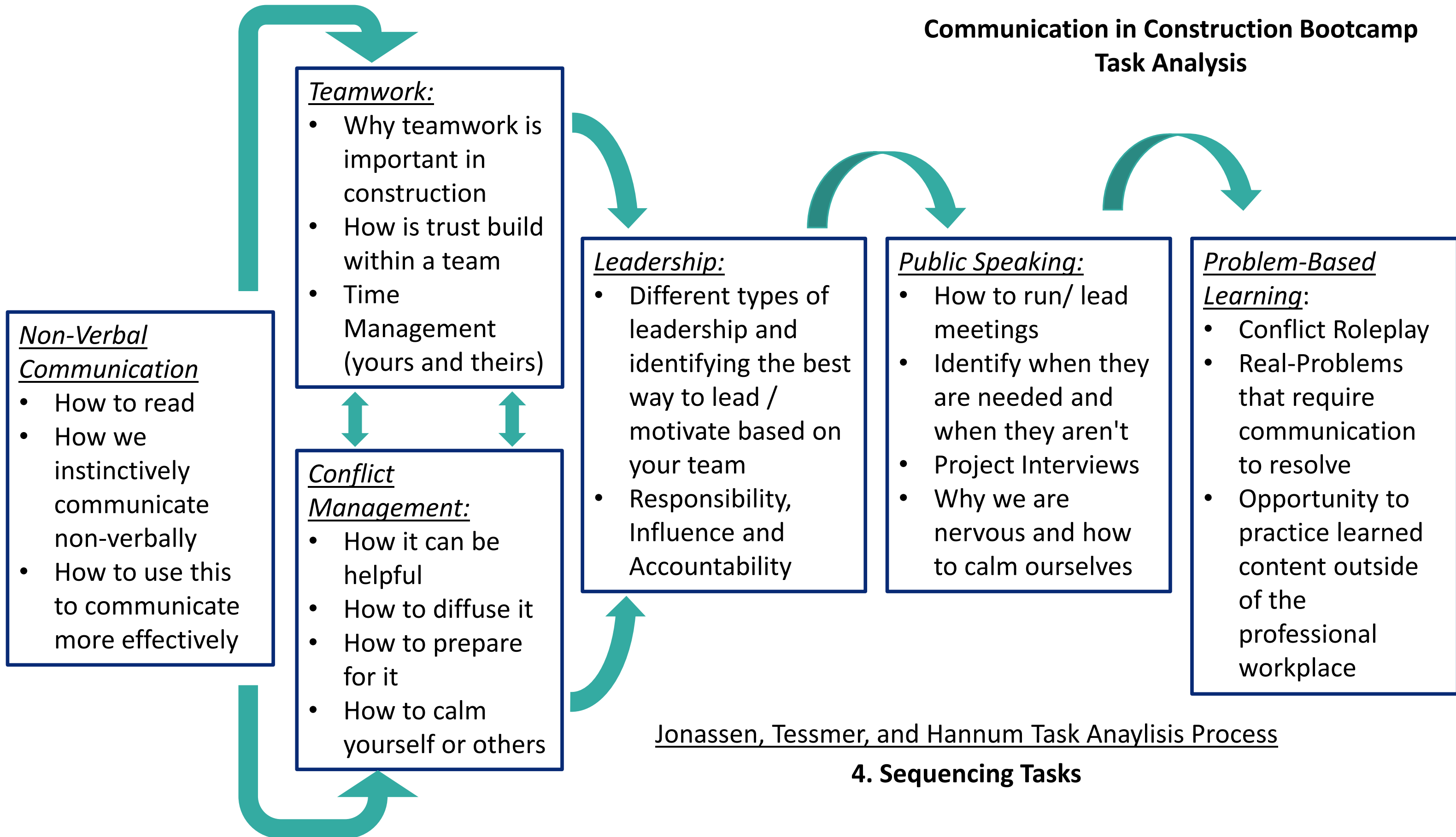
# 3.1 References

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- Golman, D. (2017). *Leadership that gets results*. [Kindle Paperwhite version]. Retrieved from [https://www.amazon.com/Leadership-Results-Harvard-Business-Classics-ebook/dp/B06XGJ3PWF/ref=tmm\\_kin\\_swatch\\_o?\\_encoding=UTF8&qid=1569328878&sr=8-3](https://www.amazon.com/Leadership-Results-Harvard-Business-Classics-ebook/dp/B06XGJ3PWF/ref=tmm_kin_swatch_o?_encoding=UTF8&qid=1569328878&sr=8-3)
- Golman, D. (1994). *Emotional Intelligence*. [Kindle Paperwhite version]. Retrieved from [https://www.amazon.com/Emotional-Intelligence-Matter-More-Than-ebook/dp/B000JMKVCG/ref=tmm\\_kin\\_swatch\\_o?\\_encoding=UTF8&qid=1569331132&sr=8-3](https://www.amazon.com/Emotional-Intelligence-Matter-More-Than-ebook/dp/B000JMKVCG/ref=tmm_kin_swatch_o?_encoding=UTF8&qid=1569331132&sr=8-3)
- Lencioni, P. (2002). *The five dysfunctions of a team*. [Kindle Paperwhite version]. Retrieved from [https://www.amazon.com/Five-Dysfunctions-Team-Leadership-Lencioni-ebook-dp-B006960LQW/dp/B006960LQW/ref=mt\\_kindle?\\_encoding=UTF8&me=&qid=1569329917](https://www.amazon.com/Five-Dysfunctions-Team-Leadership-Lencioni-ebook-dp-B006960LQW/dp/B006960LQW/ref=mt_kindle?_encoding=UTF8&me=&qid=1569329917)
- Sinek, S. (2017). *Leaders eat last: Why some teams pull together and others don't*. [Kindle Paperwhite version]. Retrieved from [https://www.amazon.com/Leaders-Eat-Last-Deluxe-Together-ebook/dp/B00G3LoZTQ/ref=tmm\\_kin\\_swatch\\_o?\\_encoding=UTF8&qid=1568837850&sr=8-3](https://www.amazon.com/Leaders-Eat-Last-Deluxe-Together-ebook/dp/B00G3LoZTQ/ref=tmm_kin_swatch_o?_encoding=UTF8&qid=1568837850&sr=8-3)

# 4.1

COMMUNICATION IN CONSTRUCTION (CIC)  
**APPENDICES**  
**Task Analysis Flow Chart**

## Communication in Construction Bootcamp Task Analysis



Jonassen, Tessmer, and Hannum Task Analysis Process

### 4. Sequencing Tasks

# 4.2

COMMUNICATION IN CONSTRUCTION (CIC)  
**APPENDICES**  
**Proposed Syllabus**

## Communication in Construction (CiC) Industry Bootcamp Syllabus

### Industry Instructor:

**Name:** Amy Powell

**Phone:** 303.772.4051

**Email:** [apowell@GTC1.net](mailto:apowell@GTC1.net)

**Dates:** TBD (Department to Identify)

**Location:** Room 211

### Course Description:

Construction is a “people business”. Although we are frequently working with our hands or managing schedules, budgets and materials, all these inherently involve other people as well. When we are informed about how people communicate and how we can more effectively communicate with others, our productivity goes up, our stress level goes down and our project teams start to work more efficiently. Communication in construction will hit on varying levels of communication from how our feet send certain subconscious messages to how we can most efficiently work within a team to motivate our coworkers, team members and ourselves and successfully complete projects.

### Course Goals:

- To educate students on the different types of communication as they relate to the construction process and how to determine what type of communication is best in different and difficult situations.
- To educate students that effective leadership within construction includes knowing how to interact with people and how this indirectly impacts the success of a construction project.
- To prepare students for the frequent difficult conversations inherent to high stress - high reward situations and how to best approach or handle conflict during these difficult - discussions.
- To improve the confidence and ability of entry level construction industry members of how approach and carry on challenging conversations while choosing the best form of communication to maintain professional relationships within the industry

### Assessment:

Description	Points
Quizzes	
What Do You Want to Learn	10
Non-Verbal	10
Leadership	5
Conflict	10
Assignments:	
Non-Verbal Peer Evaluation	10

Voice Mail Response	10
Meeting Plan of Action	10
Meeting Invitation	5
Meeting Peer Evaluation	10
Activities:	
Meeting Simulation	20
TOTAL POINTS	100

## 5-Week Outline:

### **Session One – Non-Verbal Communication**

This session will cover how we communicate on a subconscious level including brief information on molecular level findings about how we interact and perceive others (and why we as humans care). It will also cover body language and how (whether we realize it or not) we give off and pick up on signals. When we are aware of these and able to utilize these to match our verbal communication, we can communicate more effectively and understand others intent more clearly.

Objective: At the end of this 3-hour course, students will be able to better understand an interlocutor's non-verbal communication as well as how to use non-verbal cues to support their own verbal message while communicating in a professional setting.

#### Discussion:

- Introductions
- Non-Verbal Communication

#### Activities:

- Personal vs. Professional Space
- Importance of and Rules of a handshake
- Where to sit in meetings

#### Assessment:

- Non-verbal Quiz
- Students will complete a non-verbal communication assignment while watching the capstone presentations.
- What do you want to learn?

### **Session Two – Teamwork and Trust**

Whether you have the leadership title or not, you still have the choice and power to motivate within the team. Knowing what to say and how to say it contributes to a project and companies' success. This session will go over how to use some of the techniques from the previous communication sessions to help you in becoming a great leader and team player.

Objective: At the end of this 3-hour course, students will be able to integrate techniques to build trust and respect within a team communicate and collaborate on building projects.

Discussion:

- What makes teams successful
- Reasons someone would work with us
- How to create an All-Star team
- How to approach to a boss/superior.

Activities:

- Lego Bridge Team Activity

Assessment:

- Voice Mail Response Assignment

### **Session Three – Conflict and Leadership**

This session includes helpful steps to dealing with conflict as well as information on how to communicate to diffuse the heightened emotional state of others. Additionally, the different traits of successful leaders and the 6 different leadership styles as lined out by Daniel Goleman will be evaluated and discussed for relevancy within the construction industry.

Objective: At the end of this 3-hour course, students will identify and demonstrate the different leadership communication styles as well as the different approaches to conflict based on the desired outcome of difficult conversations while maintaining professional relationships.

Discussion:

- What makes a leader?
- Why do you want to be a leader?
- Differences between a manager and a leader.
- Benefits of conflict.
- How to diffuse conflict.

Activities:

- Leadership Match
- Conflict Role Play

Assessment:

- Diffusing Conflict Quiz
- Leadership Quiz

### **Session Four – Public Speaking**

This session will cover information on why most people fear public speaking and how to overcome these fears. Information will include chemical and natural reactions in your body to better understand how to keep these under control to help deliver a better speech. This session will also cover meetings and project interviews as they are the most common forms of public speaking within the industry.

Objective: At the end of these 3-hour course, students will identify typical bodily response to public speaking and how to effectively overcome these and properly prepare for meetings and interviews to improve situations where public speaking is required.

Discussion:

- Guest Lecture Business Development & Project Interviews
- Non-Verbal Aspects of Interviews & Presentations
- Public Speaking in Construction

Activities:

- Prepare for Meeting

Assessment:

- Prepare Plan of Action
- Email Meeting Invitations

### **Session Five – Communication in Construction ‘Escape Room’**

This session will consist of a challenge where participants will break into small groups and tackle a simulated construction problem. Although there is not a “right” answer, the process in which the groups work together and utilize the skills that they have learned from previous sessions will be put into action. It also serves as practice as to how to handle some of these situations when they arise within their career so that they are better prepared and informed of how they can be handled.

Objective: At the end of this 3-hour course, students will become aware of and prepared for how to handle the heightened emotional state of themselves and the other team members while having a difficult professional conversation.

Activities:

- OAC Meeting

Assessment:

- Facilitation of Meeting
- Evaluation of Meeting

# 4.3

COMMUNICATION IN CONSTRUCTION (CIC)  
**APPENDICES**

**Instructional Plan and Assessment for Non-Verbal  
Course**

# Communication in Construction (CiC) Bootcamp

## Non-Verbal Lesson Plan

### I. Objective

- a. At the end of this 3-hour course, students will be able to better understand an interlocutor's non-verbal communication as well as how to use non-verbal cues to support their own verbal message while communicating in a professional setting.

### II. Duration

- a. 3-hours

### III. Resources Needed

- a. Candy
- b. Large Post-it Notes
- c. Dry erase markers
- d. Printed Quiz's

### IV. Classroom setup

- a. Projector
- b. Screen
- c. Audio
- d. Internet Access for YouTube videos
- e. Table in the front with movable chairs for specific activities

### V. Outline and Timeline

- a. 4:00 – 4:30 - Prezi Introductions - <https://prezi.com/view/NTow4PFLMdzmlbeXE2wF/>
  - i. Class introductions
  - ii. Who am I
  - iii. Who is GTC
  - iv. Disclosures (Tools not answers)
- b. 4:30 – 5:30 - PowerPoint
  - i. CM Grad Stats – why leadership and communication is needed
  - ii. **Observation and Awareness Activity**
    1. I walk into the room 3 different ways and sit at front table as if sitting down for a meeting. Students observe different non-verbal cues and then discuss differences and impact of non-verbal impact.
  - iii. Impact of a first impression
  - iv. Rules of Body Language from Carol Goman
  - v. Instinctual Hand Gestures while speaking
  - vi. **Handshake Activity**
    1. Go through dos and don'ts of a business handshake. Students will practice this with peers.
  - vii. Hand gestures while speaking or listening and what they mean
  - viii. Eye movements and what they mean
  - ix. 5-eye contact tips YouTube video
  - x. Sitting and stances and when to use what in business

**xi. Personal Space Activity**

1. Students will pick a partner and stand a certain distance away. The different zones will be discussed and they will get a feel for each of the different zones from public to personal and what is acceptable in different business situations.

**c. 5:30 – 5:40 BREAK**

**d. 5:40 – 6:00 PowerPoint Continued**

- i. Feet and how to understand a persons motives based on position or movement of their feet

**ii. Where to sit activity**

1. Student volunteers will sit at the head table as if they walked into the construction trailer for an owner meeting. Evaluation of where they sit based on assumed leadership positions.
- iii. Information about the 'head' seats at a business table and to be cognizant of this based on natural instinct and your position within the company or within the meeting.
- iv. Video on tonality and the impact of the tone of your voice.

**e. 6:00 – 7:00 Peer Evaluation**

- i. Students will visit a neighboring classroom to evaluate their peers on their final capstone presentations. These are final projects of the entire construction management degree where industry members come an grade their presentations. The bootcamp students will be handed an assignment and asked to observe the non-verbal cues of 2 different presentations. This will be turned in for a grade.

**VI. Resources and References**

- a. Goman, C. K. (2011). *The silent language of leaders: How body language can help -or hurt- how you lead*. [Kindle Paperwhite version]. Retrieved from [https://www.amazon.com/Silent-Language-Leaders-Help-Hurt-How-ebook/dp/B004SQS6SK/ref=sr\\_1\\_1?ie=UTF8&qid=1546551624&sr=8-1&keywords=the+silent+language+of+leaders](https://www.amazon.com/Silent-Language-Leaders-Help-Hurt-How-ebook/dp/B004SQS6SK/ref=sr_1_1?ie=UTF8&qid=1546551624&sr=8-1&keywords=the+silent+language+of+leaders)
- b. Eye contact prepares brain for social interaction - <https://neurosciencenews.com/eye-contact-social-interaction-10808/>



1. Write 5 non-verbal cues identified while observing the speeches and if it complemented or may have compromised their verbal message at the time:

Non-Verbal Cue	Did this complement or compromise the verbal message and why?

2. List 2 recommendations/ tips you could give your classmates about their presentation after learning about non-verbal communication.

1.

2.