Critical Thinking and Problem-Based Learning: A Program Built with More than One Intention

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Executive Summary

We sought to learn how to foster critical thinking skills in senior staff responsible for training and other leadership functions the workplace. We used problem-based learning and the interactive model of program planning to design an instructional program to foster critical thinking skills and improve organizational performance and workplace culture. The principle objective was to create a six-month training and ongoing support program with three primary outcomes: (1) learners will develop the ability to demonstrate critical thinking skills; (2) use critical thinking skill and PBL to develop actionable training sessions, or sessions which are delivered to their peers; and (3) feel more confident in their ability to recognize and independently solve problems through critical thought.

The program we created would be similar to a train-the-trainer session. In such trainings, more experienced facilitators teach those instructors with less experience or those unfamiliar with the information being delivered how to effectively disseminate information, field questions, conduct exercises aimed at imparting a new skill and provide effective follow-up activities. In this program, a similar tact would be undertaken though the goal would not be in teaching them how to deliver pre-established curriculum. Rather, our program would use problem-based learning (PBL) to train staff leadership in problem identification, assessing potential causes, determining gaps in knowledge, creating a problem statement, listing potential solutions and reflecting on process. Our goal is to foster staff leadership's critical thinking skills.

The instructional program was planned to last six months with a follow-on support program. Both participants and management would be asked to complete follow-on surveys at both three and six months post-instruction to collect subjective feedback on the usefulness of the

training and the application of program content in the workplace. Management participation in

the follow-up surveys and monthly discussions would reinforce their position as both

stakeholders and first-hand observers with regards to the effectiveness of the program. The

managers then become the primary data source for program evaluation and recommendations to

senior management on the efficacy of the program.

Critical Thinking and Problem-Based Learning:

A Program Built with More than One Intention

Before getting into the heart of this paper, a bit of background is needed. Staff leadership in sales, defined as non-exempt staff in a position of leadership, i.e. senior advisors and team leads, at ABC Organization has started to fall into bad habits. They do not devise solutions to organizational needs, instead relying on management to inform them of what they need to implement. They have not fully developed the ability to articulate a problem they face in the course of their everyday work, instead letting it linger until it becomes an issue impacting ABC's organizational efficacy. They do not fully understand how one area impacts another, i.e. marketing influencing sales and product development influencing marketing. And they seem stuck in the ways in which they articulate organizational goals during new-hire training and continuing education. These observations were arrived at following a focus group of management personnel across all business units, interviews with staff leadership as well as from other ABC resources, including sales figures, staff retention and staff satisfaction surveys.

Therefore, a training on critical thinking was decided upon (we will discuss why in a bit). The program we created will be similar to a train-the-trainer session. In such trainings, more experienced facilitators teach those instructors with less experience or those unfamiliar with the information being delivered how to effectively disseminate information, field questions, conduct exercises aimed at imparting a new skill and provide effective follow-up activities. In this program, a similar tact will be undertaken though the goal will not be in teaching them how to deliver pre-established curriculum. Rather, our program will use problem-based learning (PBL) to train staff leadership in problem identification, assessing potential causes, determining gaps in

knowledge, creating a problem statement, listing potential solutions and reflecting on process. Our goal is to foster staff leadership's critical thinking skills. They have reached levels of responsibility through following process and performing at a high level as measured by key performance indicators (KPI). In the following pages, we will examine why we made the choices we did regarding program ideas and content as well as how those choices fit into the six areas highlighted in chapter three of the Caffarella (2002) text as being paramount to designing a successful program using the Interactive Model of Program Planning: discerning the context, identifying program ideas, developing clear program objectives, designing instructional plans, devising transfer-of-learning plans and formulating evaluation plans.

Discerning the Context

Learning is a product of the individual interacting with the context, or the human, organizational, and environmental factors that affect decisions planners make about programs (Caffarella, 2002). And when we remember organizations are constantly changing due to political and economic climates, discerning the context in which a program is situated takes on added significance (Caffarella, 2002). This is especially true when dealing with qualitative concepts such as critical thinking and problem solving.

The principle challenge planners must deal with when discerning the context is that different planning situations call for different individuals to be involved. And the individuals involved make up the largest segment of program context. For example, some situations only require the learner and facilitator being involved. This is a classic 1:1 environment. Other times learners, facilitators, program planners, work supervisors, senior-level management and key stakeholders may need to be involved. This is likely the case for large-scale efforts aimed at

impacting organizational goals. Our program falls in the middle. We have multiple learners and multiple facilitators along with various leadership stakeholders working to develop a training program which intends to teach a qualitative skill because critical thinking is not directly measureable. This requires flexibility and the recognition that planning programs is not a linear process and most planning models are very complex. Another thing to consider when discerning the context is the planner is a learner as well (Brockett, 2015). These factors are magnified as we are not planning a program aimed at increasing skill in a defined area. This is part of the reason we went with a collaborative learning strategy in PBL.

Digging a bit deeper, Caffarella (2002) discusses how contextual factors imbedded within organizations are broadly categorized under three headings: structural, political, and cultural. Structural include the mission, goals, and objectives of organizations; administrative hierarchy; standard operating policies and procedures (Caffarella, 2002). Cultural dimensions include factors such as race, class, gender, cultural diversity, and power and oppression (Merriam, Caffarella, & Baumgartner, 2006). Political factors comprise coalition building, bargaining and power relations among individuals and groups (Caffarella, 2002). Cultural factors incorporate the history and traditions of the organization; organizational beliefs and values; and organizational rituals, stories, symbols, and heroes (Caffarella, 2002). Seeing as how our organization is rooted in respect, innovation, collaboration, and personal growth, per its mission statement, we must be mindful our program fits into the larger organizational context. This, then, leads into the ethics of it all.

As Caffarella (2002) notes, one of the values on which the Interactive Model of Program Planning rests is that using an ethical approach in making decisions once context is established.

The ethical issues involved in adult learning differ somewhat in that an adult's learning is often intimately tied to his or her life situations and status as an adult (Merriam, et al., 2006). One of the strengths of PBL as it relates to critical thinking is it is inherently tied to each learner's experiences. We will not be forcing a new paradigm on them or trying to change the way in which they perceive their surroundings. Rather, we've made the choice to leverage their strengths in a way which allows them to find their critical thinking skills using PBL. And in conducting the training in the situated nature of their daily professional experience, we are respecting the context of the program. It is simply the context best fitting the intended outcomes.

Identifying Program Ideas

Identifying-relevant ideas for education and training programs range from informal hallway conversations to comprehensive, highly structured needs assessments (Caffarella, 2002). According to Caffarella (2002) these ideas take the form of educational needs, performance problems, new opportunities, client demands, images of ideal practice, etc. Caffarella (2002) discusses several tasks involved in identifying program ideas, including:

- Generate ideas through a variety of techniques (for example, questionnaires, interviews, observations, group sessions, job analyses, review of print and computer-based materials, social indicators, and conversations with colleagues. It is important to remain open to gathering program ideas using a wide variety of techniques.

- Consider contextual issues that might affect how ideas for programs are generated.

- Realize that in most planning situations program planners cannot use all of the program ideas that have been identified, and therefore planners usually have to sort and prioritize these ideas (p. 130).

What we found in examining these areas is not only is there a need for higher levels of critical thought from staff leadership, PBL best fit the context and training on critical thinking would impact more areas than simply finding independent solutions to business problems. Rather, we feel the program on critical thinking will increase staff leadership's empathy toward trainees, overall collaboration and ability to problem-solve challenges not directly related to output in the office such as interpersonal conflict. The most important unanticipated outcome of our program, however, is that it has the potential to go beyond the office and into their community. Quite simply, critical thinking is applicable in all settings, especially as it relates to identifying issues and solutions at the local level.

Another thing to keep in mind regarding program ideas is that a collaborative training model focused on critical thinking and using PBL was not the only choice. We could have chosen from any number of ideas to address one of the opportunities discussed at the beginning of this paper, including product knowledge, a Train the Trainer session in standard lecture format, cross-function training to see how what one department does impact another or some type of team-building program to improve collaboration. After examining the many sources of information, however, we decided such paths would not have demonstrated to staff leadership we are fully invested in their development, are supportive of their needs and value their contributions. Further, we feel a program on critical thinking will shorten the amount of time it takes each of them to get into a position wherein they are impacting organization efficacy on a daily basis. Finally, a critical thinking program using PBL will increase the amount of time exempt leadership has to work with other staff members since staff leadership will have

increased independence to arrive at solutions. Each of the above-mentioned areas are covered by Caffarella (2002)

Finally, the final program idea fits in with the philosophy and intent of the organization. As stated earlier, the company values innovation, collaboration and personal growth. Tangentially, then, this indicates ongoing training is to help staff members become more effective at what they do. For some organizations this may mean being more creative and more innovative in their training efforts, serving more people, having more success with current participants.

Developing Clear Program Objectives

Creating program objectives, or "clear statements of the anticipated results to be achieved through education and training programs," and program goals, or "broad statements of purpose or intent for education and trainings programs," which answers questions like, "Why are we doing this?" (Caffarella, 2002, p. 157) is not an easy process. It involves seeking out information, informing the program's direction and cannot be done as an individual exercise. As Caffarella (2002) noted, "Program planners should not develop program objectives in a vacuum" (p. 159). Doing so runs "the risk of producing impractical and/or irrelevant projected outcomes" (p. 159). Gathering feedback from stakeholders also frames your program so that learners and facilitators have a say in what shape the program will take. It is not a one-way street. As such, we involved two main sources of input—management and staff leadership. This ensured the objectives match perceived need from all participants and objectives/goals are fit the context discussed earlier.

Based on our reflections and consultations, we developed the following:

Program Goal

The primary purpose of this training protocol is to impart critical thinking skills upon staff leadership using problem-based learning (PBL). In addition, learners can expect to expand their ability to recognize organizational challenges in order to develop individualized training programs.

Program Objectives

The principle objective is to create a six-month training and ongoing support program with three primary outcomes:

1. learners will develop the ability to demonstrate critical thinking skills

2. use critical thinking skill and PBL to develop actionable training sessions, or sessions which are delivered to their peers

3. feel more confident in their ability to recognize and independently solve problems through critical thought

There are several things to keep in mind regarding the program objectives. First, the objectives fit the problems and needs identified as priority areas. As explained earlier, for example, developing critical thinking skills amongst staff leadership is paramount to management's ability to focus on other aspects of the organization's performance. Second, the objectives reflect prior knowledge, experiences, and abilities of potential participants inasmuch as this will expand their varying levels of critical thinking, which is the critical part of the training program. Third, the objectives are discriminative; meaning developing deeper levels of critical thought is a priority and meets the needs of the targeted participants. Finally, the objectives are achievable and rational. We believe that using PBL develops critical thinking and the selected participants are capable of such development. The previous points represent an

amalgamation of critical areas in the development of program objectives Caffarella (2002)

discusses throughout chapter eight.

The main reason we believe the critical thinking objective is attainable is because PBL

"is particularly well suited for those courses whose main thrust is to help students develop the

capacity for critical thinking and analysis" (Amador, Miles & Peters, 2006, p. 28). Further,

management has many examples from past experience to draw upon which "require higher-order

critical thinking" to arrive at a viable solution (Amador, et al., 2006, p. 28), meaning there is a

wealth of real-world examples to use as case studies within this particular context.

It must be made clear that while we will measure a portion of the program's outcomes

using the previously mentioned assessment, the topic taught is largely immeasurable. After all,

thinking critically is a cerebral process involving individual interpretations of new information.

This is hardly measurable on a standard grading scale. As such, a large part of the evaluation

process will be devoted to subjective feedback from participants so management can reflect on

the activities as well as their judgement of the proposed training programs created by staff

leadership. This allows room for unintended consequences of the training to be recognized and

highlighted. There will be more on the evaluation process as we move forward.

The final thing to keep in mind with regard to program objectives is that we must be

cautious with the above-mentioned case studies. For even though an individual case study may

have had an agreeable business outcome, management must be aware that the steps we took is

not the only possible path. Any number of decisions could have been made to reach same

performance outcome. We must remain open to different interpretations as staff leadership goes

through the process of applying critical thinking. This is also an opportunity for us to learn.

Designing Instructional Plans

With program objectives in place, it is now time to move to the design of an instructional plan. We will focus on four key phases pointed out by Caffarella (2002): developing learning objectives, selecting instructional techniques, selecting instructional resources and preparing for instructional assessment.

Developing Learning Objectives

As Caffarella (2002) states, "Learning objectives, along with the terms performance objectives or learning targets, describe what participants will learn as a result of attending an education or training session" (p. 167). Additionally, learning objectives must be set within the context of our stated program objectives so as to maintain purpose in the program. Simply, learning objectives are an extension of program objectives framed in such a way that individual participants are aware of what the objectives are in relation to overall program goals. Additionally, learning objectives focus facilitators, guide content and methods, frame evaluation and help learners organize the process (Caffarella, 2002). As such, the learning objectives for our training program are:

1. Staff leadership will be able to provide a critical assessment on three PBL case studies.

2. Staff leadership will be able to identify what we know about an organizational opportunity, possible causes and gaps in knowledge (what we don't know) and where we might look for potential solutions (how can we learn it).

3. Staff leadership will be able to develop a well-articulated critical reflection on the steps taken to arrive at an actionable solution, i.e. a training program, for an opportunity of their own finding.

Selecting Instructional Techniques

Three primary reasons make using PBL as the instructional technique an appropriate selection. First, learning objectives are aimed at improving cognitive skills and strengthening problem-solving and finding abilities. As Amador, Miles and Peters (2006) note, "PBL demands that students demonstrate their ability to employ concepts, frame appropriate questions, and collect and analyze data in ways that go well beyond the superficial recitation of information" (p. 130). Using PBL allows learners improve cognitive skills, increase their ability to find problems, develop solutions and frame the value they put on their ability to impact organizational change/production. Each area is addressed in the learning objectives delineated above. Each area requires critical thought. Further, case studies and PBL are explicitly identified by Caffarella (2002) as appropriate techniques for enhancing cognitive skills and strengthening problem-solving and finding capabilities, respectively.

The second reason using PBL is appropriate is that each of the facilitators has a demonstrated ability to think critically in identifying areas of opportunity and arriving at actionable solutions. They have multiple case studies in the form of critical success factor reports, which break down opportunities into separate areas, including problem, cause, solution and potential outcome. These case studies are buttressed with resultant data after a solution has been implemented in the form of a training program.

The third reason PBL fits our program plan regards learner characteristics. Flatly, using PBL as the instructional technique allows learners to construct their own knowledge. They are able to use their interpretations of a case study to arrive at a wholly independent conclusion on the studies strengths and weaknesses. And seeing as how senior staff member has already found

quantitative and qualitative success within the organization, we want to empower them to find

solutions using critical thought, not merely incorporate our suggestions. They are past

behaviorist-based training sessions using competency-based learning and are experts at using

organizational systems. Using PBL and case studies also allows for learners to teach facilitators

as they complete the task. There are surely other avenues which could have been taken to reach a

similar outcome.

Selecting Instructional Resources

As noted above, case studies are a fine fit when using PBL as the method of instruction. This is a

sentiment shared by Amador, Miles and Peters (2006) and Caffarella (2002), among others.

Further, Caffarella (2002) is clear that PBL is suitable for programs with high learner

involvement and active participation. And seeing as how we are not teaching new systems or

function-related processes, we need not have supplemental resources available. This program

strictly revolves around critical thinking within our situated context.

Preparing for Instructional Assessment

Instructional assessment will involve two main pieces. First will be a general

self-reporting assessment on critical thinking abilities. This will be given at the start of the

program, halfway through and once again at the end. The second and third assessments will also

include questions aimed at understanding learner attitudes and feelings toward the case studies

presented, whether or not additional materials are needed and how they feel about the facilitators,

including respect for different viewpoints, openness to interpretation and overall engagement.

The intent here is to utilize formative assessment to help facilitators gauge how learners feel

about the resources presented and the program in general. In conjunction with the assessments,

facilitators will keep a daily journal, reflecting on "what was done well, what could have been

done better, and what could have been done differently" (Caffarella, 2002, p. 190). There will be

weekly facilitator meeting to critically reflect on the program to that point and identify ways in

which improvements can be made. Do we need to have staff leadership dig a bit deeper on a

point, for example, in order to better articulate their thought process? Remember, part of critical

thinking is the development of well-reasoned arguments that take into consideration several

viewpoints and extenuating circumstances.

Devising Transfer of Learning Plans

Caffarella (2002) defines transfer of learning as "the effective application by program

participants of what they learned as a result of attending an education or training program" (p.

204). This goes beyond the assessment of cognitive knowledge, psychomotor skills, or attitudes

that the learner can demonstrate at the conclusion of the program. Rather, the transfer of learning

focuses on the application of the content in their work or personal life. The transfer of learning is

closely related to five elements of Caffarella's (2002) Interactive Model of Program Planning:

"[C]ontext...program ideas and needs, program objectives, instructional plans, and program

evaluation" (p.220). The transfer of learning is also the third of Kirkpatrick's (2006) four levels

of evaluation.

Many factors can influence the transfer of learning back to the workplace. Caffarella (2002, p.

210) categorizes these factors into six areas:

- Program participants
- Program design and execution

- Program content

- Changes required to apply learning

- Organizational context

- Community and Societal forces

Similarly, Kirkpatrick (2006) describe four conditions needed for change to occur:

- "The person must have a desire to change.

- The person must know what to do and how to do it.

- The person must work in the right climate

- The person must be rewarded for change

Mager and Pipe's (1983) performance analysis process describes conditions similar to Kirkpatrick for implementing change. Mager & Pipe's approach notably looks for process-related improvements before using training as a solution. However, both groups of authors recognize the importance of learner motivation to change, identifying and teaching needed skills, and climate on performance improvement. Consequences must reflect the desired change. That is, desired performance must be encouraged and rewarded, while poor performance is not. This may seem intuitive, but is not always the case.

As described previously, the program goal is to impart critical thinking skills upon staff leadership and expand their ability to recognize and independently solve organizational challenges through critical thought. The instructional program is planned to last six months with a follow-on support program. Both participants and management will be asked to complete follow-on surveys at both three and six month's post-instruction to collect subjective feedback on the usefulness of the training and the application of program content in the workplace.

With respect to a follow-on support program, participants and faculty will be invited to participate in a monthly meeting or conference call to discuss real-world examples of organizational challenges. The sessions will be moderated by the program facilitators in order to maintain a neutral environment to discuss cases from a decision-making standpoint and not second-guess the actions. The goal is to continually improve the decision making process, build the participant's skills, and incorporate new examples and lessons learned into the instructional program. Participants and managers will be encouraged to maintain a journal to capture real-world cases and their reflections on the decision-making process in real-time for later review and discussion at the monthly meeting.

Formulating Evaluation Plans

Program evaluation provides multiple sources of data on program performance and to support judgements on the program's effectiveness and return on investment. Kirkpatrick's (2006) evaluation model contains four hierarchical levels of evaluation: Reaction, learning, behavior, and results. In Kirkpatrick's model, the reaction level collects participant feedback at the time of instruction. Learning, the second level, is the assessment of learner knowledge, skills, or behaviors at the conclusion of training. Evaluation of learning can also be thought of as summative feedback. As mentioned previously, evaluation of behavior was discussed as part of the transfer of learning plan. Finally, reaction assesses the impact of the educational program on business performance and the return on investment.

As discussed previously, assessment and evaluation in this program is difficult due to the subjective nature of the program content. Management participation in the follow-up surveys and monthly discussions reinforces their position as both stakeholders and first-hand observers with

regards to the effectiveness of the program. The managers then become the primary data source

for program evaluation and recommendations to senior management on the efficacy of the

program.

Conclusion

All told, the program created for ABC's staff leadership is one of self-discovery.

Learners will discover they have the ability to critically reflect on an organizational issue and

arrive at an actionable outcome as a result of their efforts. They will also discover the steps taken

to arrive at a solution in the workplace are not that different from finding ways to better one's

community. Our hope for facilitators is that they will discover the strength and talent of staff

leadership from a perspective other than doing. Staff leadership is capable of so much more than

merely executing management directives. There is wisdom in the work they do. Allowing them

to demonstrate their ability to be the solution benefits everyone. And in choosing PBL as the

vehicle to teach critical thinking, we feel we are on the way to accomplishing our outcomes.

Author Reflections

Becky Baugh

A good staff training program is just that - a program, with a structure and logic to it that

make sense for your organization. It should continue throughout the life of the organization and

include initial training for new staff development (ongoing training for all staff), and professional

development (the opportunity to gain new knowledge or skills, or to move to the next level of

expertise).

Creating such a program involves planning that includes people to be trained, and looks at both what kind of shape the training program should take and what areas it should cover. The development of a training program also requires thinking about methods (how the training will be presented), logistics (where and when training will be held, what's necessary to make it all go well, etc.), and evaluation (how you'll find out what was valuable and what was not, and what you should do to improve the program over time).

Developing a training program that meets the needs of both staff members and the organization, and keeps the organization growing and changing for the better, is a big job. The benefits to be gained will far outweigh the effort.

As I reflect on our final project I can't help but to compare our program planning experience this semester to my reading by Brockett (2015) *Teaching Adults A Practical Guide for New Teachers* and how he states that the four keys to effective teaching, (know the content, know the adult learner, know the teaching, and know yourself), are very critical to program planning. Brockett (2015) discusses how breaking down the four key areas to effective teaching breaks down the teaching-learning process into manageable pieces. If you start by looking at these areas separately it can be a little overwhelming just like program planning. This is where the use of the Interactive Program Planning Model helps the program planner to break down program planning into different sections and makes it more manageable and not as overwhelming.

Brockett (2015) also discussed that the glue that binds all effective teachers is the quality of caring. It is Brockett (2015) belief that an important part of maturity is a shift in self-concept from being dependent on others toward becoming increasingly self-directed. We found in our

program planning as it pertained to Problem-based learning and working with Senior Staff members that training was critical to the independence of staff and to encourage their use of critical thinking and the movement away from constantly asking other staff and management for the answer in every instance. The process of being able to critically think and solve work related issues on their own without the assistance of others being involved. Knowing where to find the answers and how to get the results needed to do their job effectively.

I believe that we met all of our goals and objectives with our program planning. It is unfortunate that we are doing this in a classroom setting and will not have the opportunity to actually conduct the session as a group. We have pulled enough information together that I do believe that any one of us could potentially put this program on at a later date for our employers.

My most important takeaway is learning to function in a group from a distance and being able to put all of the essential pieces together to make a successful program. It was often difficult to get everyone together and on the same page. The amazing thing is to watch it all come together and the pieces fit together to perfectly mesh to form an effective training program.

I do feel that I have had a transformative learning experience. This project has made me research very deeply into program planning and how to best utilize me resources available to me. We started our project out with everyone being at a distance and with basically nothing and built a great training program that we can possibly use in our future workplaces or even the concepts and ideas in an educational classroom setting. This project has taught us how to work together, be flexible and adaptable and to step outside of our boxes.

As a future adult educator I will value the Interactive Model of Program Planning and find it a useful resource. Incorporating Problem-based learning into my curriculum and training

programs will be a very rewarding and valuable learning experience for my students and

participants. I feel that with the use of critical thinking my participants will have a great

take-a-way message and it will be more than just lecturing to them. Personally I typically get

more out of a learning experience when I am asked to use critical thinking skills and apply the

learning experience to myself. I feel that I benefit more from a self-directed, problem based

learning situation than just memorization. With memorization I tend to not remember the

information for as long as if I have to actually apply myself. I feel that my participants will have

a transformative learning experience if they have a variety of theories, methods, and techniques

involved in my teaching style.

Overall I feel I benefited from this project. It was nice to get to know my classmates a

little better as I often feel a little disconnected as an on-line student and myself personally I like

the classmate connection. I learn a lot from hearing about my classmate's experiences. This is

my adult learner side coming out!

Dave Brashinger

We applied theory and experience to the design of our adult education program.

However, we were not able to see it in operation and observe it in real-world application. Our

original proposal remained relatively constant throughout the evolution of the project. I believe

we stayed true to the case context and scope that Matthew envisioned. Supporting Matthew's

case early on provided a foundation around which our team could integrate elements of

Caffarella's (2002) program planning model.

Group projects are always challenging in the distance learning environment, especially

for working adults. This course was no exception. While group work provides the opportunity to

take on larger real-world projects, it also adds extraneous cognitive load for coordinating the group's activities. I found that my individual learning became secondary to the completion of the group project. I focused on my assigned tasks to support the overall success of the group. I feel that the three members of our group worked well together to accomplish this project.

I did not experience transformative learning during the completion of this group project. In Mezirow's view, transformative learning results from a change in beliefs, attitudes, or perspectives (Merriam, et al., 2007). Our project was consistent with my prior studies on instructional design, needs analysis, and evaluation during my IST doctoral program. I also found it interesting to observe some of the social phenomena discussed in Dr. Kwon's course on computer-supported collaborative learning as our group completed this project.

I do not feel that the development of our group project made a significant impact on my practice as an adult educator. I currently teach and manage in online higher education, so my current practice is in a different environment from more mainstream definitions of adult education. However, I was able to draw parallels to my prior practice in technical training and view that work through the lens of adult education.

Matthew Smith

As I reflect on the work done this term, two things strike me. First, I learned what I set out to learn. At the start of this project, I wanted to see how using the Interactive Model of Program Planning differed from the ways in which I normally prepare programs. To be sure, the efforts I compose are smaller in scale, serving no more than 25-30 people at a time, and a lot of what Caffarella (2002) covers in her text is for larger initiatives. That said, planning a program around a topic like critical thinking is quite nuanced, making it larger in scope than it is in size.

What I discovered is that many of the things I already do line up with the IMPP. I feel this is due to the fact that I am not developing organization-wide trainings. One area I have started to incorporate in every session, whether it be 1:1 or small-group, is to start with concrete learning objectives. I have always made it know what we are going to be going over, though I never actually outlined them prior to beginning. I am already seeing greater levels of participation as learners now know exactly what they are supposed to take away. It is a simple, yet impactful, step to take as an educator.

Second, with communication comes success. We had a bit of difficulty getting this off the ground due to several circumstances. Once we developed a plan, however, we completed the tasks as assigned. We used several communication formats, including email, Adobe Connect and text messaging. We also played well to each other's strengths. I won't get into the particulars of it all, but suffice to say, each individual stayed within their zone of accountability, meaning the final product flows well and articulates our intention well. I would like to take this concept much deeper, perhaps doing extended research on how to leverage critical thinking/theory to impact organizational efficacy while also developing learners more engaged in emancipatory learning. I believe adult educators can do both and have found some literature on something called critical constructivism. And if I'm being honest, that is my one concern with our paper. For me (and I am only speaking for me), I would have liked to fuse more of these ideas into our final submission. I did not stress this in my sections or in our conversations, however, so it's no one's fault but my own. I do intend to further this line of thought, though.

I will say this project impacted me deeply. As an academic exercise, it reinforced convictions I've long held. Outside what I've already mentioned, I think the biggest

reinforcement is learners that make their own meaning based on experience. Dave's application of IMPP is based off his work in the field and the readings. Becky's is exactly the same. I feel this way as I would have taken parts of their assigned sections in a different direction. This is by no means to say their work isn't strong. Quite the opposite. They took the same text I did and found ways to apply it in manners I would have never considered. And as I reflect on that, it solidifies in my mind there is no right way to learn, and this project is a direct representation of this belief.

As I've already mentioned, I am including outcomes in every encounter. I also feel the use of PBL has applications outside the scope of our project. For example, PBL is certainly a worthwhile instructional technique for larger concepts such as critical thinking. After doing research in the completion of our project, however, I believe it can be applied on smaller scales with shorter-term outcomes. This is something Amador, Miles and Peters (2006) make clear. There is no one box PBL fits into. I'm looking forward to the next step in its incorporation into my work as an organizational educator and political activist.

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