Abstract

When was the last time you interrupted your routine of ‘transm issal teaching’ and focused the lens of teaching and learning more intently onto the learners? When was the last time you put down the chalk and invited the learners to take up the chalk? When was the last time you stopped doing all the talking and encouraged to your learners to ‘talk out loud – express their perceptions and understandings?’

This paper describes an interactive strategy called MUDD Mapping: My Understanding through Dialogue and Debate. In this activity, the teacher and the learner engage in a teaching-learning partnership, through the use of experiential and hypothetical talk. Learners are invited to take the mud of their courses (usually the course objectives) and sculpt the mud into something that makes sense to them, something that they can understand. MUDD Mapping relies on a commitment by the learner to complete required readings, to take new knowledge from these readings, and to test the relationship/relevancy to a main or central concept. The teacher is present during a MUDD Mapping activity, but acts chiefly as the facilitator for the process, with ‘intervention’ status reserved for when the learner is experiencing difficulty.

MUDD Mapping: What is it?

MUDD Mapping is an interactive teaching-learning activity, wherein the central activity is dialogue and the main participant is the learner. The overall goal of MUDD Mapping is to bring learners together so that they can engage in purposeful dialogue. Purposeful dialogue is defined within the parameters of MUDD Mapping as dialogue that leads to improved and sustained
‘understanding’ of a particular subject matter. The exact modes of dialogue that are used in MUDD Mapping are experiential dialogue and/or hypothetical dialogue. In experiential dialogue, the learner talks about past experiences that can be related to the topic at hand. Experiential dialogue has the potential to foster a connection between past experiences and new learning. In hypothetical dialogue, the learner proposes or hypothesizes, ‘what if’. This latter mode of dialogue has the potential to foster a discovery for new learning.

The foundation of MUDD Mapping is built around the conviction that dialogue is the single, most important feature in the quest for learner success. Dialogue allows learners to think out loud, to bring their ideas, views, positions, propositions, and the like out into a larger forum. In this larger forum, learners can affirm, validate, modify, or add to their knowledge base. MUDD Mapping provides the forum for dialogue so that the learner can work towards (a) affirming existent knowledge, or (b) discovering new knowledge.

In a MUDD Mapping activity, it is the learner who carries on the dialogue. Prior to the activity, the teacher (facilitator) provides an overview of the purposes and ways of dialogue, but does not directly enter into the learner’s circle of dialogue.

The MUDD Acronym: Learner Focused, Learner Friendly

Every word in the acronym, MUDD, has been intentionally assigned, so that it is learner focused and learner friendly. The acronym begins with the letter M, which represents the pronoun my, indicating ownership. My implies that the learner is taking ownership for learning and is doing so at the very outset of the activity. My takes the attention away from the teacher and refocuses the lens where it should be… on the learner! My is a measure of the learners acquisition of knowledge as well as a measure of how well they integrate/immerse themselves into the teaching-learning process. I sometimes think that when learners are completing course evaluations, they do so in the context of putting themselves outside the teaching and learning process, devoid of the My factor responsibility!
The letter \( U \) refers to *understanding* and it is the second word in the acronym. It denotes that the teaching and learning bar has been raised from simple memorization or rote learning to more the complex conceptualization of material. At this crucial juncture in the MUDD mapping process, the learner attempts to draw new conclusions from recognized knowledge sources (e.g., required readings, journals, etc.), as well as from their experiences. It involves dialogue that seeks to find the answer to the question ‘why’ and that hypothesizes “what if”. Throughout dialogue the learner begins to exhibit many forms of hypothesizing, e.g., supposing, proposing, contemplating, and entertaining. Understanding is more likely to occur when the dialogue moves from a tentative position statement – I think I know – to a more confident position statement wherein there is greater confidence and conviction – I am [more] certain that I know.

The third word in the acronym, *dialogue*, represents an outward, measurable expression of one’s understanding (or misunderstanding) about a concept or idea. Dialogue that is experiential (experiences that connect to the concept) and hypothetical (open to affirmation or new discovery) gives way to a more informed view of a concept or idea. Dialogue provides rich opportunity for a learner to hear another person’s perspective and compare it to his/her own. This comparison allows the learner to maintain his/her original view, modify it, or abandon it altogether.

The last word in the MUDD acronym is *debate*. It is used when a learner has a strong knowledge base sufficient to allow him/her to enter into a debate with another learner on a particular concept. At this level of a MUDD activity, the learner would be able to independently engage in the rigor of debate (not to be confused with argument), using a knowledge base (academic and/or experiential) as the foundation for dialogue. Debate involves higher level thinking, similar to what one expects in a critical thinking exercise. Hence, a senior or graduate level learner would benefit from the opportunity to use ‘debate’ in a MUDD Mapping activity.
Early Planning Considerations

1. **Review principles of adult learning and self-directed learning:** Both the teacher, as facilitator, and the learner, as the active participant, must clearly understand and subscribe to the principles of adult learning and self-directed learning. In order for MUDD mapping to be successful, the learner may need an introductory session that explains the relationship between these principles and the expectations of MUDD Mapping.

2. **Secure the right tools:** The tools consist of a flip chart or other large marking board, as well as several erasable markers. The marking board should be strategically placed so that it is in the center of the learners’ seating arrangement.

3. **Design the physical set-up:** Arrange an area where a circular seating plan could be accommodated, or a seating arrangement that would allow for ease of eye contact between participants. It is recommended that the typical row-on-row classroom seating, be avoided, as it suggests structure to an otherwise unstructured learning activity. In a recent MUDD session, the merit of this planning consideration played out in one learner’s post-MUDD activity comments, “At first I was a bit hesitant because of the whole ‘public speaking’ thing. I like the smaller groups better because we are sitting around the table at the same level and all giving and adding to the topic that is being discussed.”

4. **Call for participants:** All learners should be invited to participate. Learners must familiarize themselves with and agree to follow the “Rules of Engagement” (see Box 1). Bullet A of the Rules of Engagement, states that “Learners must acknowledge that they have read the required readings”. The value of this criterion was supported in a learner’s post-MUDD activity comments, “MUDD Mapping helps to get a better understanding of material, but it is good to know or read material before hand.”
Box 1. Rules of Engagement

MUDD Mapping: Rules of Engagement

A. For the Learners

- Learners must acknowledge that they have read the required readings.
- Learners must acknowledge that they have completed any pre-assigned activities.
- Learners must demonstrate willingness to ‘dialogue’ by taking a turn at presenting a word or phrase that connects to the central theme or concept.
- Learners must be receptive to constructive and ongoing criticism of peers and the teacher.

Learners must come prepared to engage in dialogue (experiential and hypothetical). Therefore, before the session begins, learners are reminded that they must agree with and have complied with these rules of engagement. Failure to do so means that the learner can be excluded from the session, or, asked to leave during the session. This is not a punitive action, but an affirmation to those who come prepared, that there will be purposeful and meaningful dialogue, based on knowledge. You cannot have a MUDD session without a commitment to dialogue.

B. For the Teacher

- The teacher will explain the process of MUDD Mapping [the principles of adult learning; experiential and hypothetical dialogue].
- The teacher will secure the tools needed for MUDD Mapping.
- The teacher will begin the activity by identifying the central concept to be MUDD Mapped.
- The teacher will move outside the learners seating circle, once the central concept is mapped, but will remain present, so as to offer any needed re-direction and/or clarification.

A teacher should not lead a MUDD Mapping session if he/she (a) does not support the principles of adult learning and (b) does not value learner dialogue.
MUDD Mapping: Sequential Steps

MUDD mapping is a series of short sequential steps. The nature of the topic as well as the actual learner dialogue will determine the length of a MUDD activity. An activity can span anywhere from 20 minutes to a full 50 minutes. It can be presented as an alternative to a class lecture, or, it can be presented as a review class.

**Step one:** The teacher extrapolates a single central theme from an objective in the course outline or syllabus. That key word is transferred into a circle, strategically drawn in the middle of the flip chart. Multiple two-way arrows are then drawn as extensions from the circle. These arrows act as the links between the central theme of the course and the learners’ perceptions of various concepts related to the central theme.

*Sample:* Let’s use a course that most people would be familiar with. Let’s use Cardio Pulmonary Resuscitation (CPR), an activity that involves teaching individuals how to respond to an unconscious victim, with an interruption in airway, breathing and/or circulation patterns. A plausible objective for the CPR course would read as follows “Initiate two-person CPR on an adult”. From this, the teacher would isolate the word *CPR* and would write it the center of the circle. Next, the teacher would draw as many two-way arrows as possible, extending from the center of the circle out to the periphery. The arrows could be called ‘dialogue arrows’, in that they are the points on the flip chart where the learners will write words or phrases that relate back to the central word, CPR.

*Figure 1.*

![Figure 1](image)

**Step two:** The teacher invites the learners to come forward (one by one) and write a single word or two at the tip of an arrow, any arrow. The teacher moves
outside the learners circle. The word that a learner chooses may come from their notes, the required readings, a video, etc. Through dialogue they must demonstrate how the word relates to the concept that has been written in the center of the flip chart.

Sample: A learner comes forward and writes the word *ventilations*. The learner shares what he/she understands about that word and how it connects with the inner circle word/phrase. The quest for better understanding is filtered through dialogue. Experiential and hypothetical dialogue is encouraged. Experiential dialogue may arise when the learner describes a CPR activity that he/she has witnessed. The learner can ask other learners in the room for help, or other learners can challenge what the learner at the flip chart is presenting. MUDD Mapping does not discourage the use of print material during the activity, e.g., having their textbooks open. This freedom to have ready access to the print material reinforces that MUDD Mapping is a learning activity as opposed to a testing activity. A word of caution: emphasize that access to print material does not replace the prerequisite Rule of Engagement that speaks to the need to have the read the material before the MUDD session begins!

In step two, other learners can interject, seek clarification, and offer a differing perspective. When the learner at the flip chart, feels that he/she has a greater understanding between the word in the center and the word that he/she wrote, then another learner comes forward and makes a similar entry, using another new word. The process repeats itself until all connectors (words and phrases related to CPR) have been presented. There should be an ongoing demonstrable saturation of dialogue between learners. This would be an indication that the MUDD activity is a success!

*Figure 2.*
The teacher can offer prompts, encouragement, support and reinforcement on an as needed basis, but remains outside the circle. At any time, anyone in the group can seek additional information, add new information, or challenge the information being presented. The ability to challenge is the highest point in the MUDD process, as it represents, debate. A MUDD mapping session can provide the advanced learner (senior or graduate level) with the opportunity to enter into a debate, that is, to take a stand on a particular position, using knowledge as the foundation, massaging it to a level of understanding and bringing it to a forum where he/she can confidently engage in therapeutic debate.

**Step three:** Once all key phrases/words have been exhausted and are represented as appendages to the circle and when the learners feel that they the words/phrases have been successfully connected to the center of the circle, the MUDD Mapping activity is complete.

**Figure 3.**

The Application of MUDD Mapping – A Second Illustration

The use of MUDD mapping is not confined to any particular subject area, or any specific psychomotor competencies. It can be used in a variety of educational settings. Box 2 contains an example of its use in a social studies course (secondary or post-secondary context) where the learners must write a 50% paper on an assigned topic. The aim of the paper is to evaluate the learner’s understanding of a particular topic. In the paper, the learner is expected to speak to a number of issues that are central to the topic. Providing an opportunity for a MUDD Mapping activity prior to the writing of the paper could prove quite useful to the learner!
Box 2. Social Studies Illustration of MUDD Mapping

**Note:** The readings within this example are fictitious and were created to illustrate the use of MUDD Mapping in a Social Studies context.

**Social Studies 000B**

**Objective extrapolated directly from course outline/syllabus:** To write an essay on school-grounds violence.

**MUDD Mapping activity:** Teacher explains MUDD Mapping, complete with principles of adult learning and self-directed learning. Learners are given a copy of the *Rules of Engagement*.

The teacher names the central concept to form the basis of MUDD dialogue – Violence. Hence the MUDD mapping session will be on Violence.

**Learner pre-requisites:**

A. Readings
   - Read chapter 26 of course textbook
   - Read Current Affairs section of *The Globe and Mail*
   - Read Statistics Canada Report on Violence in Schools
   - Visit web site on ‘bullying’ (give web site address)
   - Read reports on behavior disorders among adolescents

B. Activities
   - Interview a local teacher to get views on subject of school-grounds violence.
   - Interview a parent of an adolescent who has been the target of school violence.
   - Visit a community health center that provides support to victims of bullying.

Here are some words or phrases that are likely to have been generated from the readings, and that the teacher might expect the learners to create as appendages to the concept *Violence* in the exercise. Note that the teacher does NOT provide these words as a list. They are generated by the learners, as a result of completing the learner Pre-requisites!

<table>
<thead>
<tr>
<th>Peer pressure</th>
<th>Drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher – student ratios</td>
<td>Television</td>
</tr>
<tr>
<td>Computers</td>
<td>Parental supervision</td>
</tr>
<tr>
<td>Bullying</td>
<td>Disabilities</td>
</tr>
</tbody>
</table>

Proceed with steps of MUDD Mapping as described earlier.
FAQs

**Q:** The Rules of Engagement suggest that the ‘quiet’ learner should not be permitted access to a MUDD activity, unless he/she is committed to carry out dialogue. Is this fair to the learner who’s afraid or uncomfortable in speaking up in a group?

**A:** This is absolutely fair for a MUDD activity. Because MUDD Mapping is based on dialogue, you must have a commitment by participants to dialogue. Without dialogue you do not have a MUDD Mapping activity. The Rules of Engagement must be applied in order to safeguard the activity.

However, during a MUDD session, the degree of participation is not something that is not monitored, therefore the quiet learner can be reassured that any amount of dialogue, no matter how brief, is acceptable. Hence, the quiet learner can be engaged in the activity as long as there is some measure of dialogue. What is NOT acceptable is NO dialogue!

As educator’s we have a responsibility to help the quiet learner be successful in not only the academic world, but the ‘real’ world where dialogue is an expectation! In addition, to give permission for a learner to attend a MUDD activity, without any up front commitment to dialogue is unfair to those learners who have agreed to, and expect that there will be, dialogue.

**Q:** Can MUDD Mapping be done with large groups?

**A:** While the size of the group is somewhat dependent on the nature of the subject to be discussed, the group size should not be so large that is it impossible for the group to carry on audible dialogue. It is perhaps a good idea to break a larger group (e.g., 60) down into smaller sub-groups (e.g., 10 –12). The teacher, as facilitator, would then circulate back and forth to the groups. In MUDD Mapping, the teacher is acting as facilitator, which means he/she does not have a constant presence with one group.

In a MUDD activity involving a group of senior nursing students, the students were divided into smaller working groups. While they were in one large room, they were well spaced apart so that they could comfortably hear one another.
Q: Is there any particular subject matter or program of studies that works best for a MUDD Mapping session?

A: MUDD Mapping can be applied to any subject that requires a learner to reach an understanding of a particular subject. It has the potential to work for any K–2 curriculum subjects. It also has the potential to work for any post-secondary program of studies. The applications for its use are limitless – mathematics, English, history, sociology, etc.

It is important to keep in mind that the nature of the subject is only one factor in answering this question. Inherent in the applicability and subsequent success of a MUDD Mapping activity is the teacher’s (facilitator’s) enthusiasm for and leadership in using a MUDD session so that the dialogue that does take place and does lead to understanding.

Q: Are there any cautions to be considered in the use of MUDD Mapping?

A: From experience, the single, most resounding caution would be to take care with the application of this activity so that it retains its original intent – dialogue to promote understanding. Without dialogue, the goal of MUDD cannot be achieved. The Rules of Engagement must be clearly explained and consistently applied.

Q: What are the benefits of dialogue?

A: Dialogue promotes interaction, which in turn, generates an exchange of ideas. Without dialogue, or insufficient dialogue, classrooms becoming nothing more than a repository of facts, figures, formulas, steps, and the like, wherein the learner simply collects information without ever knowing what’s behind that information.

Q: Who are the benefactors of a MUDD Mapping activity?

A: In MUDD mapping, there are rewards for both the learner and the teacher. The teacher’s reward is found in the satisfaction gained from listening to the learners as they dialogue about a concept, as they move from a tentative way of thinking to a way of thinking that is more informed. It’s a teachers’ paradise to
be in a teaching-learning environment where the learners are formulating and verbalizing their understanding of course concepts, through dialogue. The learner’s reward, on the other hand, lies in knowing that he/she can ‘walk the walk and talk the talk’. It’s a learners’ paradise to be in a teaching-learning environment where the learner feels safe to explore perceptions and understandings related to the course and to be able to test out the validity of these perceptions in a constructive way. MUDD Mapping is not rocket science but it has the potential to give a power boost to the most mundane of materials to be taught!

**Where to from Here? – Creating a Virtual Team**

Using the elements of a Virtual Team, as described in Julia Loughran’s article “Working Together Virtually: The Care and Feeding of Global Virtual Teams”, I have partnered with another Canadian professor, outside my own province, to create a virtual team. Together we will explore the further use of MUDD Mapping in our respective post-secondary settings. The results of our efforts will be shared as an oral presentation at the 2007 Society for Teaching and Higher Learning in Education (STHLE) to be held in Alberta this June.

Below is some of the positive feedback received to date:

“I tried it out with my students and it worked like a charm…the students led the discussion and they were very confident with their knowledge.”

“…it [MUDD Mapping] was a hit with the students and really helped in identifying their understanding of the material.”

“This was definitely the most rewarding and thought provoking class I have ever taught, when I didn’t teach at all, I mean in the traditional teaching methods I used in the past.”

“It would be a great tool for every class in Nursing dealing with concepts.”

“This was an excellent class. It was great to interact with classmates while learning. It helps to see the view of others. It would be great to use on other courses.”
“It shows a different and dynamic method of teaching.”
“MUDD makes objectives more understandable and clear.”
“I enjoyed MUDD after I gave it a second chance. It is very helpful to hear people explain things in their own words.”
“MUDD Mapping helps to get a better understanding of material, but its good to know or read material before hand.”

**Conclusion**

MUDD Mapping is a great way to get learners more involved in their own learning. It brings the responsibility and focus of learning back to the learner, while retaining the role of the teacher as facilitator. Hence, it is an activity that can foster the partnership of teaching and learning. What greater satisfaction is there in education, than to know teachers and learners have worked together so that at the end of the day, learners can ‘walk the walk… and talk the talk!’

**References**


