69

Increasing Informal Learning Opportunities for Teachers in the School Setting

Amanda Giust
Florida International University, USA

Abstract: This paper comprehensively defines how to implement informal learning strategies into the classroom setting using Marsick and Watkins's Incidental Learning Model (2001). Existing barriers that stand between educators and informal learning in the school setting are explained. Implications for removing said inhibitors while increasing learning are explicated.

In the past decade, the public school systems have been under scrutiny due to the No Child Left Behind Act of 2001 (107th Congress, 2010) and the Race to the Top Program (111th Congress, 2009) that offer funding to schools that excel in performance and achievement in high academic standards. This new attention has placed pressure on teachers and administrators to keep up with rising standards. As school systems attempt to strive for higher test scores, and as the funding crisis continues, schools are continuously re-examining and enhancing teaching strategies. Traditionally, improvement of teaching practices is done through formal learning practices, such as professional development seminars, certification programs, and graduate level courses. However, this traditional formal learning has becoming substituted by informal learning (Lohman, 2000). Informal learning refers to everyday learning that happens either incidentally or by seeking information individually (Marsick & Watkins, 1990). Both types of learning, formal and informal, share common desired outcomes for teachers: to develop more job knowledge, to learn new skills, and to enhance understanding of the school function (Lohman, 2000). Lohman (2000) and Stronge (2007) both deduced that informal learning is the key element to becoming an effective teacher in today's public school system.

Research around informal learning in schools is in its infancy and limited mostly to descriptions of informal learning and its triggers and barriers to informal learning (Hoekstra & Korthagen, 2011; Lohman, 2000, 2006). The research lacks a comprehensive description of how informal learning could be facilitated in schools. This paper will suggest how by using Marsick & Watkins's (2001) Incidental Learning Model, school administrators could use teacher teams and e-learning to increase informal learning opportunities for teachers in the school setting. It is imperative that informal learning be clearly defined and expanded upon before applying learning models.

Defining Informal Learning

Informal learning was first described in the adult learning context by Marsick and Watkins (1990) who defined it as learning that is not formal or not in a highly structured, classroom environment. This type of learning can be encouraged by an organization, or it can happen in an environment that may not be the expected place of learning (Marsick & Watkins, 1990). Informal learning has been described by different authors to come in multiple forms. Bennett (2012) outlined three types of informal learning in a general context: self-directed, socialization, or incidental. *Self-directed learning*, for example, may occur when an employee seeks out information about a work-related topic by using technology or asking a colleague. *Socialization* refers to the hidden curriculum that occurs in organizations when an employee

adapts to the culture. *Incidental learning* is a byproduct of a task or interaction, and the learner may not necessarily be aware that learning is happening. An example of this type of learning is when an employee uses trial and error to accomplish a task. Incidental learning is the focal point of this particular paper.

Marsick and Watkins (2001) later created the Incidental Learning Model as Adapted with Cseh which describes the process of informal learning (See Fig.1). The model is a circle that has the context in the center. The context represents everyday learning that can occur or obstacles that may offer opportunities for informal learning. The outside circle around the context contains the stages that occur within the context of the learning. The outside circle begins with triggers, or actions that begin the learning process. Next, the beginning stages of the learning process can occur which are in no particular order: interpreting the experience, examining alternative solutions, and learning strategies. During this time, the person is reacting to the trigger and beginning to search for a solution or strategy to continue the process. Subsequently, the final stages of the learning model can also occur in no particular order: producing proposed solutions, assessing consequences, lessons learned, and framing the business context. During this time, the person is creating new schema and applying it to everyday life. Although the learning model is not cyclical or inclusive, it depicts that informal learning cannot begin until a trigger occurs. "Informal and incidental learning take place wherever people have the need, motivation, and opportunity for learning" (Marsick & Watkins, 2001, p.28). In the case of increasing informal learning in the school setting, it becomes the administrator's responsibility to create triggers which will allow for informal teacher learning.

Informal Learning and Teachers

Lohman (2006) outlined the informal learning process within the school context as learning that takes place for the teachers and staff in the school district outside of formal in-service days, professional development, and furthering education. There are three types of informal learning in a school-based context: knowledge exchanging, experimenting, and environmental scanning. *Knowledge exchanging* is a shared experience with others, often times reflecting on information given by others. For example, two teachers discussing an article given by a superior can have a knowledge exchange where each sheds a new perspective on the information that causes the other to reflect. *Experimenting* refers to an active experiment similar to that of incidental learning, and is typically a conscious decision by the learner. An example of this learning would be a teacher implementing different behavior charts in a classroom to find which one is most effective with the students. Finally, *environmental scanning* is any type of learning done outside of the school on the teachers' own time (Lohman, 2006). This includes attending a library to do outside research, surfing the web, or using a social media to gain knowledge.

Hoekstra and Korthagen (2011) performed a study on 32 secondary school teachers and deduced that when it comes to informal learning, having supervision of the teacher during the learning process can enhance the experience. Hoekstra and Korthagen (2011) also noted that supervision can create an environment where teachers feel seen and offers the teachers an opportunity to increase awareness of their teaching style and personality in the classroom.

Boud and Middleton (2003) conducted a study that examined informal learning in teacher workgroups in four different settings and discovered is that teachers are more likely to ask another teacher for information before asking a principal or other superior. Additionally, teachers are more likely to ask a teacher with more seniority before asking a teacher with equal or lesser experience than themselves. However, the general conclusion is that there is a large and

diverse group of people that teachers gather information and learn from daily; the people giving information do not have to be superiors or teacher trainers.

Inhibitors of Informal Learning of Teachers

Lohman (2000, 2006) completed studies of inhibitors to informal learning in the public school setting. The results of the studies depicted four main inhibitors of informal learning for teachers: lack of time, lack of proximity to learning resources, lack of meaningful rewards for learning, and limited decision-making power in school management.

The first inhibitor, lack of time, is a result of increased number of students in classrooms, inclusion in the classroom, and additional supplementary nonteaching responsibilities (Lohman, 2006). Teachers reported in the study that they had to spend more time planning and putting together lessons for a large, diverse group of students in the classroom. However, the teachers stated that there was not enough nonteaching time during the school day to work on lesson planning. Some teachers also indicated having nonteaching responsibilities during the day due to district changes and budget cuts (Lohman, 2000).

Lack of proximity to learning resources includes teachers' rooms being physically placed far from one another as well as from administration, lack of technology or up-to-date technology in the classrooms, and lack of access to the school library because of location. Teachers reported having trouble accessing computer labs for students without having a scheduled time. Others also stated being too far from the school library to gather information when there was a question in class (Lohman, 2000). Teachers later detailed that having collaboration with colleagues was preferable when informally learning and being too spread out was inhibiting that process from occurring (Lohman, 2006).

The next inhibitor, lack of meaningful rewards, includes no monetary rewards for attending learning sessions or hosting clubs, no recognition for additional learning, and more time away from the classroom if done during the work day. Teachers reported that although they were urged to take charge of committees and get involved, the monetary rewards were few to none. Some teachers also expressed that as the workload increased in the classroom, the less interested they became in being away from the classroom without any reward (Lohman, 2000).

The final inhibitor is limited decision-making power in school management. Teachers indicated feeling as though they had little say in the decisions made by principals. Some reported that their suggestions were declined while others stated that school policies were made without any teacher input (Lohman, 2000).

Implications for School Administrators

As stated by Marsick and Watkins (2001), a trigger is needed to begin the informal learning process. Although the learning model itself is not cyclical, the desired outcome from the trigger is for the teacher to experience critical reflection through *double loop learning*. Scribner Cockrell, Cockrell, and Valentine (1999) describe double loop learning as "continuous questioning of basic premises to ensure against error" (p. 134). In regards to Marsick and Watkins's (2001) learning model, double loop learning refers to the teacher going through the learning process, bringing the information learned back to other teachers, therefore creating a new trigger, restarting the model, and continuing this pattern. This type of learning can occur if the inhibitors to informal learning as outlined by Lohman (2000, 2006) are eliminated. Outlined below are two possible solutions to utilizing Marsick and Watkins's (2001) learning model while also removing barriers: teacher teams and video learning (or e-learning).

Teacher Teams

One of the most basic informal learning techniques is collaboration in teams or groups in the workplace before, during, or after the work day. Working in teams offers teachers informal learning through knowledge exchange, environmental scanning, and socialization (Boud & Middleton, 2003; Lohman, 2006). The idea of working in teams is reinforced by the studies of Scribner et al. (1999) who shared that working in groups creates an environment where teachers can (a) examine of the values of the school, (b) generate new ideas and knowledge, (c) share information and findings, and (d) build the capacity to use the new knowledge effectively. Therefore, utilizing teacher teams can be the starting point of the informal learning process.

Effective use of teacher teams aligned with Marsick and Watkins's (2001) incidental learning model. The trigger to begin the informal learning process in the case of teacher teams is to establish a clear objective. Crow and Pounder (2000) suggest having "clarity of task requirements and restraints" in regards to teacher teams (p. 221). As a result, the objectives for the meetings must be clearly defined along with the requirements and limitations of topics covered. For example, if the purpose of the meeting is to discuss a lesson that did not work and what the teacher did to recover from the lesson, then the objective could be to have each teacher outline a lesson that did not go as planned and describe the actions taken to recover the lesson using positive language. The objective is clear, yet broad enough for teachers to insert their own creativity. Teachers could write about the experience, act out the experience, include lesson plans and revisions, or simply walk the team through the experience verbally. Furthermore, the positive language portion of the objective places a limitation on the topic and creates clear boundaries.

Continuing with the sample objective, teachers should be given time to work in their teams. Depending on how the group is collaborating, the time frame could be a few days to a few weeks. During this time, teachers are perhaps unknowingly going through the stages of Marsick and Watkins's (2001) Incidental Learning Model (See Fig 1.). The teachers will be sharing stories which interpret their own experiences and interpret the experiences of the other team members. The team members then have the opportunity to give feedback or alternate solutions regarding the lesson that did not go as planned.

The next step depends on the direction in which the teams take the objective. The administrators should be monitoring the activity of the teams either in person or through a program such as *Google Drive.* The desired outcome for this objective would be for the teachers to go through double loop learning by taking the suggestions back to their classroom and returning to the team with new feedback regarding the lesson. Although some teams may do this automatically, others may need assistance. Administrators might need to prompt teams by offering suggestions for lessons and asking them to report back to the team with information about consequences, what the students learned, what the teacher learned, and how it will affect the teacher's planning for the next lesson. All of these prompts align with the stages of the learning model (See Fig 1).

Once teachers become familiar with the process, topics and objectives may begin to evolve. Crow and Pounder (2000) state communication between administrators and teacher teams may change over time, but the focus should remain on the students. It is the administrator's role to ensure that teacher teams are keeping the student knowledge in the foreground while continuing along with the informal learning process. Administrators can do this by maintaining relevant objectives and regularly monitoring and communicating with the team members.

Following teacher teams' alignment with the Incidental Learning Model (Marsick & Watkins, 2001) is eliminating barriers to informal learning and the learning model. Research by Lohman (2000, 2006) in regards to the four main barriers in the school systems are examined in regards to teacher teams.

Key points regarding eliminating barriers using teacher teams. The first barrier to be considered is a lack of time in the workplace (Lohman, 2000, 2006). Teacher teams do not necessarily have to meet in person to be considered a work group. Crow and Pounder (2000) suggest that if a meeting time cannot be scheduled for all parties during the work day, perhaps e-mail groups or group bulletin boards should be created. With the increased technology, having a discussion board similar to those of online classes can also be an effective tool. Additionally, *Google Drive* allows teachers an opportunity to exchange and edit documents online. Accessing *Google Drive* and discussion boards on classroom computers or through mobile phones allows for quick reading and reviewing during a break in the workday, therefore eliminating lengthy meetings.

The next barrier to eliminate is a lack of proximity to resources (Lohman, 2000, 2006). Programs such *as FaceTime* or *Skype* offer teacher teams the chance to video chat for free. If the technology for *FaceTime* and *Skype* is not available in the classroom setting due to funding, many of the programs can be accessed from most personal computers, tablets, and mobile phones. Administrators can be included in these meetings to ensure additional materials are provided to enhance learning (i.e. scholarly articles). If the funding is available, providing each group a room with a computer or *Ipad* allows them access to scholarly articles as well as mediums of social networking that can answer questions. If extra technology is inaccessible, then the administrator could provide printed copies of scholarly articles for all participants to read or review.

Subsequently, the barrier regarding rewards for informal learning is the next to be eliminated. Setting up a rewards system for collaborating in a team does not necessarily have to be monetary. One example may be having a duty (i.e. bus duty or study hall) covered by the administrator for the week for those who have successful group meetings. Rewards can be given for active participation in the team, for completing tasks (given to them or of their own accord), or on a randomized basis. Additionally, stating the perks of teacher teams to the teachers can allow for a more rewarding experience. Some examples may include: no meetings that pull teachers away from the classroom, no obligations for formal learning, opportunities for knowledge exchange between teachers, and possibilities to create change in the school without excessive work outside of the classroom.

The final barrier addressed by Lohman (2000, 2006) is lack of involvement in school decisions. Each teacher team should have a designated leader, preferably decided by the group. Crow and Pounder (2000) found that teams with leaders perform better than without leaders. This allows administrators an opportunity to include the teams in school-wide decisions by having a leader speak on the team's behalf. Not only will this give teachers a greater sense of autonomy, but it also allows for an environment where more change can be accomplished. For example, administrators could offer more opportunities for the teacher teams to speak about how things are decided whether it is regarding school lunches or teacher duties. Additionally, administrators can utilize teacher teams to enhance communication between teachers and school leaders. Once the rapport has been established, the gateway for communication is open for teams to ask questions as well as for administrators to keep ongoing consultation with teams about the

school, school district, legal consideration, and development of students (Crow & Pounder, 2000).

Video Learning or E-learning

Another informal technique that is becoming increasingly popular due to websites such as *YouTube* is video learning or e-learning. This is a process where one watches a video that could be a tutorial or strictly informational and applies it to their classroom. Video learning or e-learning is supported in research by Svensson, Ellström, and Åberg (2004) who stated that e-learning promotes personal development, increases self-confidence, and creates a more proactive work environment. E-learning allows for the teachers to work at their own pace making it optimal for teachers reporting not having enough time during the work day. This type of learning also allows for more teacher autonomy throughout Marsick and Watkins's (2001) learning model.

Effective use of video learning aligned with Marsick and Watkins's (2001) incidental learning model. In the case of video learning, the trigger for Marsick and Watkins's (2001) Incidental Learning Model can include providing a video for teachers to watch or asking teachers to find video resources for a particular topic. Just because a teacher has access to these videos online does not ensure that the teacher will have the motivation to search for videos or tutorials regarding topics that can assist with informal learning. In addition, just showing a video online to a group of teachers does not guarantee that the informal learning process will begin. Therefore, a support system must be set up along with the trigger to ensure that informal learning occurs (Svensson et al., 2004).

The first thing to consider is the topic that is chosen. Regardless of the content of the video, it always needs to be related back to the school in some way. Whether this is done through informal discussion, e-mail, or group discussion, the administrator should incorporate how the video relates to the school or classroom. The more the topic relates to the organization, the more informal learning will lead to better strategies in the classroom (Svensson et al., 2004).

Once the topic is chosen, a location must be specified. Svensson et al. (2004) suggested creating a learning center that includes a television, computer, table with chairs, projector, and copier all in one space. For some schools this may be feasible, but for others placing it in an area where the teacher is apt to be may be the best option. This could be the teachers' lounge or on the televisions in the classrooms. Having an e-learning center creates multiple opportunities for informal learning by supplying the following: a computer with access to relevant information, a space where teachers can share ideas or information, and a space where administrators can share information and communicate with teachers. If placing an e-learning center in the school is not possible, many mobile phones and tablets that teachers own can stream videos.

After these preparations are in place, there are several ways to support teacher learning from watching informational videos. One example would be for the administrator to ask each teacher to watch an informational video about classroom management and to choose one tactic from the video to implement in their class for a week. By having the teachers complete this task, they are looking at alternative solutions to their own classroom management plan and therefore beginning the stages of learning in Marsick and Watkins's (2001) Incidental Learning Model (See Fig. 1). At the end of the week, the teacher could share the results in multiple ways: through e-mail to the administrator, through a face-to-face conversation with the administrator, verbally expressing the results at a regularly scheduled meeting, or by writing a short synopsis that is shared with the rest of the teachers. Through the discussion of the results, the teachers can address consequences of the task along with lessons learned along the way.

It is up to the administrator to follow-up the activity by communicating to the teachers regarding their learning and restarting the learning model by offering a new trigger. In this particular case a new trigger could be a follow-up video activity for the teachers, a discussion individually to the teachers about their experience, or even combining the e-learning experience with teacher teams by having the teachers discuss their findings within their teams.

Following the alignment of video learning to the Incidental Learning Model (Marsick and Watkins, 2001) is the removal of barriers in regards to learning and the learning model. The four main barriers defined by Lohman (2000, 2006) are examined in relation to video learning.

Key points regarding eliminating barriers using video learning (e-learning). The first barrier to eliminate as described by Lohman (2000, 2006) is that of time restraints. Since video learning can be used without a formal meeting, it is practical for teachers. Regardless of where the or how the video learning is accessed, administrators should keep in mind the length of the video or activity so teachers do not feel the e-learning is additional work without supplementary pay as depicted by Lohman (2006). If the video is being shown streaming on a television, then it must be offered at multiple times throughout the day to ensure all teachers are able to view it. If local computers are used, then those computers should be available before and after school for those teachers without a long break in the work day. Options such as streaming a video on a television screen before or after school hours ensures teachers' free periods are not being disrupted. Accessing the video from a personal device allows teachers to watch videos and complete activities on their own time.

The next barrier, limited proximity to resources, can be eliminated by utilizing local computers and televisions, creating an e-learning center in the school, or allowing teachers to access videos from their own personal devices such as mobile phones and *Ipads*. If showing a video, teachers must ensure that the link or streaming video is distributed to all teachers so there is no extra searching involved. If the activity is having teachers search for videos regarding education, then providing search sites specifically for that purpose will aid in the process. Also, the administrator is an active part of the video learning process, therefore becoming an additional resource to teachers.

The third barrier is a lack of rewards for teacher learning (Lohman 2000, 2006). An incentive program could be set up at the beginning of the learning process such as a raffle. For example, if there are five e-learning experiences in the semester, the teachers may receive one entry in a drawing for each learning process in which they partake. Therefore, a teacher who completes all of the learning experiences has a better chance of winning than those who do not. Prizes for such a raffle could include monetary items such as a gift cards or other prizes.

The final barrier to consider eliminating is a lack of involvement in school decisions. The administrator's involvement with the e-learning process can strengthen rapport with teachers. Through this process, the teachers have the opportunity to view the administrator as a resource and can become more comfortable asking important questions. Once the line of communication between administrators and teachers opens, the opportunities increase for teachers to become more involved in the school. Furthermore, the administrator can examine the teacher's feedback from the e-learning to better serve the teachers in the future.

Conclusion

Although there are several potential options for administrators to eliminate barriers to informal and incidental learning in the school setting, teacher teams and e-learning are two low-cost suggestions applicable for any school. Using the information disclosed in this paper, school administrators can create triggers to jumpstart the Incidental Learning Model (Marsick &

Watkins, 2001) and facilitate teachers in recognizing when said incidental learning is taking place. These learning options assist in creating an environment that promotes teacher informal learning without additional spending for formal presentations.

Teacher teams and e-learning are also effective tools in reversing teacher attitudes towards teacher development by demonstrating that learning does not have to take place in lengthy meetings. Additionally, informal learning ultimately leads to double-loop learning and lifelong learning (Scribner et al., 1999). Once the teacher recognizes the learning taking place, more opportunities for continued learning will emerge.

Teacher teams and e-learning create closer ties between teachers and administrators, allowing for better relationships and more understanding of school processes. Teacher teams coerce teachers to work together and engage in knowledge exchange. E-learning creates an opportunity for teachers to become more comfortable with technology that could also be used in the classroom.

It can be predicted that research regarding the benefits of informal and incidental learning for teachers will be refined in the near future as schools begin to explore more options. Using the information from the Incidental Learning Model (Marsick & Watkins, 2001) and the research on barriers to workplace learning for teachers (Lohman, 2000, 2006), it is possible that it will become more commonplace for school administrators to focus primarily on informal learning techniques. Further research may include the effect of informal learning for teachers on teaching techniques and classroom management.

<div align="center">References</div>

107th Congress. (2010). *The No Child Left Behind Act of 2001*. Retrieved from U.S. Department of Education website: http://www2.ed.gov/policy/elsec/leg/esea02/index.html.

111th Congress. (2009). *The American Recovery and Reinvestment Act of 2009.* Retrieved from U.S. Department of Education
    website: http://www2.ed.gov/programs/racetothetop/index.html.

Bennett, E. E. (2012, January). *A four-part model of informal learning: Extending Schugurensky's conceptual model*. Presentation delivered at Adult education research conference 2012. Retrieved
    from http://www.adulterc.org/Proceedings/2012/papers/bennett.pdf

Boud, D., & Middleton, H. (2003). Learning from others at work: Communities of practice and informal learning. *Journal of Workplace Learning*, *15*(5), 194-202. Retrieved from
    http://www.emeraldinsight.com/journals.htm?articleid=882287&show=abstract

Crow, G. M., & Pounder, D. G. (2000). Interdisciplinary teacher teams: Context, design, and process. *Educational Administration Quarterly*, *36*(2), 216-254.
    doi:10.1177/0013161X00362004

Hoekstra, A., & Korthagen, F. (2011). Teacher learning in a context of educational change: Informal learning versus systematically supported learning. *Journal of Teacher Education*, *62*(1), 76-92. doi:10.1177/0022487110382917

Kurkenberger, M. R., Mathieu, J. E., & Ruddy, T. R. (2012). A cross-level test of empowerment and process influences on members' informal learning and team commitment. *Journal of Management.* doi: 10.1177/0149206312443559

Lohman, M. C. (2000). Environmental inhibitors to informal learning in the workplace: A case study of public school teachers. *Adult Education Quarterly, 50*(2), 83-101.

Lohman, M. C. (2006). Factors influencing teachers' engagement in informal learning activities. *Journal of Workplace Learning*, *18*(3), 141-156. Retrieved from http://www.emeraldinsight.com/journals.htm?articleid=1546154&show=abstract

Marsick, V. J., & Watkins, K. E. (1990). *Informal and incidental learning in the workplace*. London, UK and New York, NY: Routledge.

Marsick, V. J., & Watkins, K. E. (2001). Informal and incidental learning. *New Directions for Adult and Continuing Education*, *89*, 25-34. Retrieved from http://tecfa.unige.ch/staf/staf-k/borer/Memoire/incidentiallearning/incidentiallearning.pdf

Scribner, J. P., Cockrell, K. S., Cockrell, D. H., & Valentine, J. W. (1999). Creating professional communities in schools through organizational learning: An evaluation of a school improvement process. *Educational Administration Quarterly*, *35*(1), 130-160. doi:10.1177/0013161X99351007

Stronge, J. H. (2007). *Qualities of effective teachers* (2nd ed.). Association for Supervision & Curriculum Development.

Svensson, L., Ellström, P., & Åberg, C. (2004). Integrating formal and informal learning at work. *Journal of Workplace Learning*, *16*(8), 479-491. doi:10.1108/13665620410566644

Figure 1. Marsick and Watkins's Incidental Learning Model as Adapted with Cseh (Marsick & Watkins, 2001)