EDN470-Assignment 3:
Professional & Action Learning Project Report
(ePortfolio presentation)

Project Title:

Implementing a range of fine motor skill activities in an early childhood setting through play.

Sharon Gigengack-31858551
Contents Page

Introduction .......................................................... Pages 3-4
Rationale ................................................................. Pages 4-6
Process ................................................................. Pages 7-10
Reflective Discussion ................................................. Pages 11-14
Conclusion .............................................................. Pages 14-16
References .............................................................. Pages 17-18

Appendices ............................................................. Pages 19-23
A: Permission Forms ................................................ Pages 19-22
B: 30 Hours Confirmation ............................................ Page 23
Introduction

“Young children need to participate in a variety of developmentally appropriate activities intentionally designed to promote fine motor control.” (Huffman & Fortenberry, 2011, pg. 100).

For this Professional & Action Learning Project Report I have chosen to investigate how to implement a range of fine motor skill activities into an early childhood setting through play. I am aware that fine motor skills are so crucial in the early years and during my experience while on practicums. I have seen evidence of this being practiced in the classroom through play dough, painting, building blocks and puzzles however I wanted to extend my knowledge in the area. First, we were required to develop and submit for assignment one, a Project Rationale and Plan. We then had to complete 10 hours in a mainstream classroom and complete our fieldwork at the school and develop a Professional & Action Learning Project Progress Report from our findings for assignment two. These two reports are in introduction to my final report and summarises my preliminary findings, outline my aims, focus questions and a reading list of extensive literature. This final report discusses my summative findings, has in depth reflective discussion and concludes my project as a whole.

I conducted my research at a small private college in the southern suburbs of the Perth metropolitan area in a kindergarten classroom. The College was a Christian college using Christian principles behind their teacher and is located in a low to middle socio-economic. The classroom had 19 children in it, with eight boys and 11 girls. Over 65% of these students were either African or Asian and the other 35% were Australian, Dutch or Mexican. Most of the African and Asian students had English as their second language (stated wrong in progress report) however overall they were quite fluent in English. I decided I wanted to go into a kindergarten classroom because as it is their first year of school, their experience with
fine motor skill activities would be minimal compared to students in the older years. Also, because they are still developing their fine motor skills, I believed this was the best year to conduct my provocations and activities in.

For my project, I focused on eight students in particular however I also took into consideration the rest of the class for general observations. I had four boys and four girls with mixed academic abilities while one of these students had a speech disorder. All of the students were very well behaved and attempted all of the provocations willingly. By focusing on just eight students, I could see the patterns amongst the different activities.

My aims for this project are:

1. Find useful and practical strategies that help me implement fine motor skills practice in play.
2. Educate myself on how important fine motor skills are within an early childhood setting.
3. Create provocations/sequence of provocations or play-based experiences that enhance children’s fine motor skills.

Rationale

In everyday life, we use our fine motor skills without even noticing it; cutting up vegetables for dinner, holding a pen for writing, typing on the computer or even texting on a mobile phone. It is so crucial that in early childhood, students are introduced to structured activities that allow for these skills to be developed. “Writing progress depends largely on the development of fine motor skills involving small muscle movements of the hand” (Huffman & Fortenberry, 2011, pg. 100). As it affects writing, if fine motor skills are not developed in these early years, it can have a huge impact on the later years mentally, physically and
cognitively. “Young children’s fine motor skills may interfere with writing.” (McAfee & Leong, 2007, pg. 60)

Play is the foundation of early childhood education and is defined as “a context for learning through which children organise and make sense of their social worlds, as they engage actively with people, objects and representations” (DEEWR, 2009, pg. 6) therefore I wanted play to be the foundation of my provocations. I created my provocations with this statement in mind, knowing that students excel in a play-based environment. Play also “allows for the expression of personality and uniqueness, enhances dispositions such as curiosity and creativity, enables children to make connections between prior experiences and new learning, assists children to develop relationships and concepts and stimulates a sense of wellbeing” (DEEWR, 2009, pg. 9). Taking into account these two important aspects of early childhood education, I decided I would merge these two ideas into one to create my plan for this project.

There are many reasons why I chose to research into the development of fine motor skills. One of the main reasons is because in my current workplace (see Appendix B), I see a lot of children take part in activities that require fine motor skills. These children are most likely mentally capable of completing the activity however it’s their fine motor skills which prevented them from doing so. Another reason I have chosen to create provocations that link play and fine motor skills together is because motor skills is something that can be developed with practice (Arthur, Beecher, Death, Dockett & Farmer, 2012.) and is not something students cannot overcome in due time. Therefore giving children the time, experience and opportunities for these skills to be developed, they should be able to complete tasks physically without there being any physical barriers. Four year olds should be
developmentally able to have small muscle coordination and should be able to use scissors, a glue stick and paint brushes and that by five years old their interests in fine motor skills increase (Copple and Bredekamp, 2006). Students were able to use a paint brush for gluing in one of the provocations (see in detail below) and they are approaching five years meaning an increase in fine motor skills interest. Another reason why I chose this as my topic is because, during the years of kindergarten and pre-primary, children’s small muscles in the hands and fingers become coordinated as fine motor development is increasingly rapid during these years. (Wellhousen, 2002, pg. 71). Because of this, it is important that you practice these skills during the years they develop the most.

I conducted my research through the method of action research. Action research has had increased publicity over the years and can be defined as “small-scale intervention in the functioning of the real world and a close examination of the effects of such intervention.” (Cohen & Manion, 1994, pg. 186) and is “usually considered in conjunction with social or educational aim.” (Cohen & Manion, 1994, pg. 187). It requires you to have chosen a field or topic of enquiry and then choosing a range of investigative techniques. (Nixon, 1981, pg. 86). In my case, my chosen field is fine motor skills and my investigative techniques are hands on, play-based provocations. This project has required me to make decisions (in regards to what provocations I set up) and be involved in my own learning (active research) which is how Mason (2002) describes action research. He also states that decision making supports description, prediction and evaluation (pg. 172) which contributes to my research and understanding.
Process

I visited the classroom six times over 5 weeks and completed six provocations/activities in total. I did not write up lessons plans however I did put in a lot of time and effort into planning these activities so I knew exactly what was I was doing. I created a timeline which I followed as a basis for my plan. Below is an overview of what happened and my findings for each provocation:

Cycle 1

Provocation 1: 28/4/2015

Overview-I gave each student a small bit of play dough each and asked them to roll it out and cut out some shapes. There was a wide range of shape cutters such as animals, plants, fruit and various shapes such as stars, love hearts and circles.

Findings-I noticed that most of the students were quite good at using the tools (rollers and cutters) to make shapes however I noticed some unique ways of making shapes. One of the students placed a cutter in front of her and put the play dough inside the cutter instead of rolling it first and then cutting it out. A few students did not hold their rolling pin correctly and others struggled with rolling out the play dough, some students did not even use the tools but instead just used their hands to play with it. However whether they used the tools or not, the students were still using their fine motor skills which I believe is most important. (Taken from Progress Report)

Provocation 2: 30/4/2015

Overview-I gave each student a small bit of play dough each and asked them to choose a placemat and follow the instructions on the sheet. There was a wide range of placemats including making curls for a ladies hair, a snail, jellyfish tentacles and a snake.
Findings - Most students started making their placemats however they quickly got bored of it and wanted to do their own thing with the play dough (each placemat had something to make. E.g. Making a snake/snail/ octopus tentacles). A few of the students rolled snakes in their hands in the air while others rolled it out on the desk. Some of the placemat tasks were a bit more complex than just rolling and cutting and some of the academically lower end students struggled with this exercise. Overall this activity still worked on improving their fine motor skills but not to the extent that the first provocation did because they lost interest in it. Overtime as they develop their skills they may learn to enjoy this activity more. (Taken from Progress Report)

Cycle 2

Provocation 3: 21/5/2015

Overview - I gave each student a feather each and put a bowl a beads in the middle of the table. The students then put the beads on the feather. I gave out extra feathers to the students who asked for them.

Findings - the students who took part in the activity really enjoyed themselves. They were eager to try different ways to put the beads on the feather (from both ends) and some children put the beads close together while others put them far apart. There was a lot of concentration on the student’s faces while they were taking part in the activity. Some students tried putting two feathers in one bead and joined the two together. This was a very good fine motor skills practice activity.
Provocation 4: 28/5/2014

Overview-in small groups, I took students around the school grounds to collect natural materials such as sticks, leaves, honkey nuts, grass, bark and sand. The students were playing with the materials for a short time before gluing them onto a piece of paper.

Findings-the students thoroughly enjoyed going around collecting the materials and were excited because it was “their own”. However I don’t think this was very good practice for fine motor skills. The students did not “play” with the materials like I expected them to however just glued them straight on the paper. They did however, use their fine motor skills to paint the glue on and stick the materials down. If I was to do this activity again I would change my approach after a thorough reflection.

Cycle 3

Provocation 5: 4/6/2015

Overview-I gave the students some string and beads to make their own necklace with. There were also patterns available for the students to copy if they wanted to.

Findings-most students took a while to get the hang of putting the beads on the string however they picked it up after a few go’s. Some of them struggled switching hands when putting the beads on. One student started beading from the end with the knot in it and it took him a while to realise why the beads kept falling off. It was good to see that this activity challenged them because I believe they then wanted to succeed. “Fine motor skills are difficult for preschoolers to master, because the skills depend on muscular control, patience, judgment, and brain coordination (Carvell 2006)” (Huffman & Fortenberry, 2011)
Provocation 6: 11/6/2015

Overview - I gave the students some play dough and golf tees and they had to balance ping pong balls, small marbles, medium marble and large marbles on them.

Findings - three students got the hang of it really quick while the others struggled. One student tried to do it too quickly and they fell off (which means she didn’t use her fine motor skills to control it). I think the students had to get used to the weight of the ball to determine how to balance it.

“…action research can be understood as about people doing everyday actions and studying what they are doing as they try to live productive and meaningful lives.” (McNiff, 2014, pg. 16). In reference to my research, these children were doing everyday actions in the classroom that is required for everyday work and I was studying ways to improve these actions. McNiff, 2014 also states that “…action research is all about collaborative and democratic practices…” (pg. 14). I have worked collaboratively with my mentor teacher and education assistant to develop fine motor skill practices which enable students to develop these skills.

The outcome of my Professional Learning Project is that you must have fine motor development activities in all early childhood classrooms. I have done the research behind it and all books, articles and publications are for it. “Fine motor movements develop better when large movement is encouraged. Remember, children cannot learn much when they are sitting still” (Bruce, 2004, pg.18). Any movement whether it be fine or gross, is better than no movement.
Reflective Discussion

During the three cycles, I planned and implemented 6 provocations which engaged students in developing their fine motor skills. I follow action research methodology to assist me in my research and this allowed me to produce successful results. The results were that the activities I planned met the outcomes of this project. From the beginning, I created aims to work towards, focus questions to be answered and strategies to be followed. I reached all of my aims (mentioned above) however my focus questions were too vague and therefore needed to be changed. Therefore my main focus question for my project was “what strategies can I use to create engaging and sophisticated provocations that provide students with opportunities to extend their fine motor skills?” The answer to that is by conducting action research and finding resources to assist me with that. The strategies used in this project were outlined in the project rationale and plan. These were to collaborate with my mentor, use self-assessment, research further into the area of fine motor development and to utilise resources the school already has. I followed all of these strategies and because of this, I believe I completed a successful project.

Another component that made this project successful was the items of evidence I used along the way. I used items as evidence for my implementation of my plan. I used a range of items and they are listed below:

**Work samples** were taken for provocation four (natural materials). There are two work samples ([Photo 1.1](#) and [photo 1.2](#)). Photo 1.1 was a work sample from provocation 4 (natural materials). The student decided to only use sand and a leave to put on her piece of paper. Photo 1.2 is another work sample for provocation 4. This student decided to use a lot of the materials that we found in the school grounds such as a range of leaves, bark, a stick, grass and sand. She did a very good of using her glue paintbrush to stick the materials down.
Photographs were taken during provocations five (beading) and six (golf tee balancing)

**Photo 2.1**- This is one of the students taking part in provocation 5 (beading). As you can see, she is using her fine motor skills to hold the string and the bead at the same time. She started using square beads in the beginning and then proceeded to use the oval beads.

**Photo 2.2**- This is another student taking part in provocation 5. She has used a pattern template to use as a guide for her beading and once finished it she started her own pattern.

**Photo 3.1**- This is one of the students taking part in provocation 6 (golf tee balancing). As you can see, he is using his fine motor skills to balancing the ping pong ball onto the golf tee which is being held up by play dough. He really wanted to balance all the ping pong balls at once and managed to do this after quite a few attempts.

**Photo 3.2**- This is another student taking part in provocation 6. She is using the marbles on the golf tees which were slightly more difficult to do than the ping pong balls because of their size. She managed to balance quite a few at a time as you can see in the photo.

In all of these photos, the students are thoroughly using their fine motor skills to take part in the activities.

Self-assessment is a way of reflecting on my own work. I created my own template as I believed this was a part of the self-assessment process and after every activity was completed, I filled it out. Brady and Kennedy (2012) state that self-assessment “prepares students for reflection on the quality of performance necessary in future professions” (pg. 77) and it “promotes learning by providing students with motivation (pg. 78). Because of this, self-assessment was one of my strategies for this project and is also part of my items of evidence. Below are the links for the cycles two and three self-assessment:

Anecdotal notes on observations were taken for every provocation. This is an immediate form of feedback for students (if required) and also a good way for you as a teacher to take immediate notes while still watching the students. It is an information way of assessing the students where they can act normal which is the best conditions for assessment. Below are the links for all six provocations observations.

Provocation 1, provocation 2, provocation 3, provocation 4, provocation 5, provocation 6.

These four strategies helped me in my research by allowing me to reflect after an activity had been completed. It was great to look back on the photos from the last cycle and see the students taking in part of something that I had created. This is what touched me the most in the project because it was no one else’s work but mine. This project has impacted my teaching by making me realise that one of the best forms of research is self-facilitated research or action research. It brought back memories from my pre-school days of doing finger painting as means of fine motor development.

The six provocations I conducted in the classroom were activities I had researched myself and I practiced them before going into the classroom (if they were new to me). Overall, I believe the tasks I set up for the children met my project topic of implementing a range of fine motor skill activities in an early childhood setting through play however I do realise that in my future classroom critical reflections must be completed and improvements can be made in order for planning an engaging and hands on classroom.
If I was to conduct the fieldwork again, I would create checklists for my own use to see if students are improving over a longer time frame. In assignment one, I said I chose this topic because I believed I would see improvement over the five weeks however this was not the case. McAfee and Leong (2007) give examples of how fine motor skills can be assessed in by using checklist and assessing six months apart. Realistically, six months is a better time frame to assess the fine motor skills however it was impossible for this project. Although, when I have my own classroom, I will be able to take this into account to assess my own students.

Conclusion
Completing this whole project has been a huge eye opener into how much research, thought and effort goes into teaching. It was really evident that in order to deepen my knowledge about a particular area, I must conduct my own action research to achieve the best results possible. For my topic of implementing fine motor skill activities in an early childhood setting through play, I have gained so much more knowledge and understanding on the reasons why play and fine motor skill practice is so crucial in the early years. It is one thing to hear about it in a lecture or tutorial or reading about it in a book, however it entirely different doing the research for yourself and implementing the activities into a mainstream classroom.

My aims (stated in the introduction) were all met. I was able to find engaging and practical provocations that I implemented in the classroom that enabled fine motor skills practice. I also observed other ways of doing this just by being present in the classroom and discussing this with the mentor teacher. The majority of her tasks revolved around fine motor skills practice which is something I want in my future classroom. By completing this project, I was required to do research on fine motor skills and I made myself aware of how important it is in
early childhood. I believe it is the foundation for all learning. And finally I created 6 provocations through play that involved fine motor skills practice. The first two linked with both of them involving play dough and the other 4 were different however all achieved the fine motor development.

The strategies outlined in the project rationale and plan were to collaborate with my mentor, use self-assessment, research further into the area of fine motor development and to utilise resources the school already has. I used all of these strategies in completing my 30 hours of fieldwork. Before I commenced each day, I would reiterate my plans for the day to my teacher and she would give some feedback on my ideas. I did not complete self-assessments for the first two provocations (i.e. cycle one) however I did for the rest of the provocations (cycles two and three) and I believe this helped me reflect my own learning. I conducted quite a substantial amount of research into fine motor skills by looking online and also at the university library and reading about the development of this. And finally I approached my mentor teacher and asked her if I could use any materials the school already had in helping complete my fieldwork. The materials and resources were very helpful in setting up my provocations.

In the future, I will keep researching new ways to develop fine motor skills. The internet is full of resources waiting to be used. Some other activities for fine motor tasks which I may find helpful in the future include transferring beads in a box (assessing both hands), beads on a rod (with and without a blindfold), finger tapping and turning a nut into a bolt (Piek, Dawson, Smith & Gasson, 2008).

Overall, by completing this project, it has confirmed my ideology that fine motor skills practice is so important in early childhood. I know that when I have a classroom of my own I will reflect back on this project to re-read research papers and books to refresh my memory of
the importance of this. This project has also made me a lot of enthusiastic about teaching as it has opening up new ideas I can do in my classroom. Action research is something I had never heard of before, however it is now something I will never forget.

Word count: 3974
Reference List


Appendix A-Permission Forms

Please complete the Permission Form below

I [Parent’s Name] have read the information above. Any questions I have asked have been answered to my satisfaction. I provide my permission to allow my child to take part in this study, however, I know that I may change my mind and stop at any time.

I understand that all information provided is treated as confidential and will not be released by the investigator unless required to do so by law.

I agree for my child’s project activities to be audio taped/ videotaped/photographed for project purposes only.

Parent/Guardian signature: [Signature] Date: [Date]

I agree work samples that my child has produced may be copied for project purposes only.

Parent/Guardian signature: [Signature] Date: [Date]

---

Please complete the Permission Form below

I [Parent’s Name] have read the information above. Any questions I have asked have been answered to my satisfaction. I provide my permission to allow my child to take part in this study, however, I know that I may change my mind and stop at any time.

I understand that all information provided is treated as confidential and will not be released by the investigator unless required to do so by law.

I agree for my child’s project activities to be audio taped/ videotaped/photographed for project purposes only.

Parent/Guardian signature: [Signature] Date: [Date]

I agree work samples that my child has produced may be copied for project purposes only.

Parent/Guardian signature: [Signature] Date: [Date]
Please complete the Permission Form below

I, [Parent's Name], have read the information above. Any questions I have asked have been answered to my satisfaction. I provide my permission to allow my child to take part in this study, however, I know that I may change my mind and stop at any time.

I understand that all information provided is treated as confidential and will not be released by the investigator unless required to do so by law.

I agree for my child's project activities to be audio taped/videotaped/photographed for project purposes only.

Parent/Guardian signature: [Signature] Date: 29/4/2015

I agree work samples that my child has produced may be copied for project purposes only.

Parent/Guardian signature: [Signature] Date: 29/4/2015
Please complete the Permission Form below

I [Parent’s name] have read the information above. Any questions I have asked have been answered to my satisfaction. I provide my permission to allow my child to take part in this study, however, I know that I may change my mind and stop at any time.

I understand that all information provided is treated as confidential and will not be released by the investigator unless required to do so by law.

I agree for my child’s project activities to be audio taped/video taped/photographed for project purposes only.

Parent/Guardian signature: [Signature] Date: 28/5/15

I agree work samples that my child has produced may be copied for project purposes only.

Parent/Guardian signature: [Signature] Date: 28/5/15
Please complete the Permission Form below

I have read the information above. Any questions I have asked have been answered to my satisfaction. I provide my permission to allow my child to take part in this study, however, I know that I may change my mind and stop at any time.

I understand that all information provided is treated as confidential and will not be released by the investigator unless required to do so by law.

I agree for my child's project activities to be audio taped/ videotaped/photographed for project purposes only.

Parent/Guardian signature: ___________________________ Date: ________________

I agree work samples that my child has produced may be copied for project purposes only.

Parent/Guardian signature: ___________________________ Date: ________________

**************

Please complete the Permission Form below

I have read the information above. Any questions I have asked have been answered to my satisfaction. I provide my permission to allow my child to take part in this study, however, I know that I may change my mind and stop at any time.

I understand that all information provided is treated as confidential and will not be released by the investigator unless required to do so by law.

I agree for my child's project activities to be audio taped/ videotaped/photographed for project purposes only.

Parent/Guardian signature: ___________________________ Date: ________________

I agree work samples that my child has produced may be copied for project purposes only.

Parent/Guardian signature: ___________________________ Date: ________________
Appendix B-30 Hours Confirmation

School of Education
90 South Street
MURDOCH WA 6150
Telephone: (08) 9360 6305
S. Hesterman@murdoch.edu.au

Re: Murdoch University student completing EDN470

1 March, 2015

Dear Principal/Teacher,

This letter is to confirm that [insert student's name] is completing a Reflective Practice unit through Murdoch University as part of their teacher education studies.

This unit requires the student to access a classroom for a minimum of 30 hours over a period of five weeks to investigate and improve upon a chosen area of their teaching as part of an action research project. The data information collected will only be used for the purpose of conducting their action research project as part of their teacher education studies.

I thank you in anticipation of your assistance that allows this student to conduct their research in your school and nominated classroom.

Yours faithfully

Sandra Hesterman

Dr Sandra Hesterman
Senior Lecturer in Education
Murdoch University
Western Australia 6150

Tel: (08) 9360 6305
s.hesterman@murdoch.edu.au

---------------------------------------------------

Confirmation of 30 hours attendance at this school to conduct an action research project

Confirmation of 30 hours completed in a class at Rehoboth Christian College

from (date commenced) 28 April 2015 to (date completed) 11 June 2015

with Mentor Teacher (please print name) Teneille Hepton in Year Level: K

Signatures:

Mentor Teacher Teneille Hepton Date 11 June 2015

Student Sharon Gigengack Date 11/6/15