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Many beginning teachers feel unprepared to teach students in their inclusive classrooms. Preservice teachers may need applied learning experiences, intentionally focused on understanding of individuals with disabilities as human rather than as their disability or label. This paper shares an applied learning project couched in the principles of Universal Design for learning completed by students in a course about disabilities. Two Student Choice Project examples are shared to demonstrate the process for completion and to provide preliminary evidence of how this project facilitated transformation of student perceptions, built awareness, and improved openness and objectivity in understanding individuals with disabilities.

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Abstract

Many beginning teachers feel unprepared to teach students in their inclusive classrooms. Preservice teachers may need applied learning experiences, intentionally focused on understanding of individuals with disabilities as human rather than as their disability or label. This paper shares an applied learning project couched in the principles of Universal Design for learning completed by students in a course about disabilities. Two Student Choice Project examples are shared to demonstrate the process for completion and to provide preliminary evidence of how this project facilitated transformation of student perceptions, built awareness, and improved openness and objectivity in understanding individuals with disabilities.

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Applied learning is an approach to education providing students with direct application of skills, theories and models (Ash & Clayton, 2009). Applied learning experiences in teacher education typically take place outside of the traditional classroom where students are able to actively engage in connecting theory to practice through multiple field experiences in school settings (Korthagen & Kessels, 1999; Tom, 1997; Zeichner, 2010). These experiences not only allow for practical application of knowledge and skills, but are required by accrediting bodies

both at state and national levels (e.g. Council for the Accreditation of Educator Preparation; CAEP). Over the years, as teacher education has grown into its own researched and evidence based discipline, applied learning experiences have taken on more structure and deliberate execution (Barnes, 2016; Bullough, Young, & Draper, 2004; Feiman-Nemser, 2001). Early student teaching experiences were short and solitary, such that programs in the 1970s had future teachers working in classrooms for as little as two weeks just before they graduated and received certification. Today, there are programs that require anywhere from 3-6 field experiences before the final field experience, and culminating teaching internships anywhere from 8 weeks to two semesters long (Bullough, Young, & Draper, 2004). While these field experiences, practica, internships, and other applied learning experiences have gained importance and have shown an increase in preservice teacher confidence when teaching and working with general education students (Darling-Hammond, 2014), newly certified general education professionals are still left feeling unprepared for teaching students with disabilities in their inclusive classrooms (Forlin & Chambers, 2011).

Many teacher education programs include some cursory preparation for teaching children served in special education. This is usually done in the form of an introductory or survey class related to disability or special education taken early in the coursework of teacher preparation programs. Still, few programs prepare preservice teachers beyond a single course. There is some research to suggest that these introductory courses do indeed improve positive attitudes towards inclusion (Ajuwon et al., 2012), which suggests that preservice teachers who take such courses leave their preparation programs more motivated and welcome to the idea of teaching in an inclusive and diverse classroom than their peers who do not. However, evidence suggests that

these teachers still feel concerned, stressed, and unprepared when they have students with disabilities in their classroom (Forlin & Chambers, 2011). This is troubling due to the increasing number of students served in the general education classroom (U.S. Department of Education, 2016). In fact, approximately 95% of children with disabilities being served under the Individuals with Disabilities Education Improvement Act (IDEA) are educated at some point during their day in the general education classroom (U.S. Department of Education, 2016). Thus, it is imperative that general education teachers are comfortable and prepared to teach, understand, and connect to students with variety of needs and characteristics.

It may be that there is an absence of an explicit focus on understanding children with disabilities in current applied learning experiences included as part of current teacher preparation programs. For example, preservice teachers may not be directed to specifically work with students with disabilities in the general education classroom, or when they do, they may not even understand which students have been identified with a disability. Without this connection preservice teachers are unable to reflect on their experiences. More importantly though, even when or if given the opportunity to work with students with disabilities in the classroom, preservice teachers are missing the opportunity to critically reflect on the traditional understandings of disability. Thus, working with students with disabilities inside the classroom in the traditional role as a teacher does not allow preservice teachers to understand students with disabilities on a deeper level. It does not allow preservice teachers to see these students as people rather than their label or disability category. When a student with a disability is viewed as a label or a disability rather than as a human, it creates a sense of uncertainty and/or concern about how to interact and teach them. To properly train preservice teachers to be prepared to work with

students with disabilities in their classroom, they must have exposure to these students outside of the classroom environment and more importantly, outside of the traditional student-teacher practica hierarchy (Rao & Petroff, 2011). It is suggested that this kind of experience will create opportunities for preservice teachers to challenge the dominant views of disability and see students who have disabilities as people with culture, experiences, likes, loves, and characters (Rao & Petroff, 2011). This type of knowledge construction will assist these teachers in developing more person-centered approaches (Roberts, Lyon, Tausch, 2014) to working with people with disabilities.

The purpose of this paper is to share an applied learning project couched in the principles of Universal Design for Learning completed by students in a course about disability and special education. In addition, this paper shares an example of a student project to provide evidence of how this project facilitated transformation of student perceptions, built awareness, and improved openness and objectivity in understanding individuals with disabilities.

The Student Choice Project

The Student Choice Project is a culminating project grounded in Universal Design for Learning (Rose and Meyer, 2002) assigned to undergraduate preservice teachers enrolled in a course about disability and special education. Throughout the semester students are exposed to multiple means of representation (guiding principle 1 of UDL), such that the information for the project, or the learning to be applied is represented throughout the semester in various ways. Students are asked to read, listen to lectures, participate in hands on activities, discussions, papers, and various small group presentations. The student choice project also provides an opportunity for students to engage in multiple ways (guiding principle 2 of UDL) with the

information learned throughout the semester. For example, students have the freedom to choose a topic, the time, and the way in which they want to apply their learning, as well as which experience they will arrange. Moreover, each student is self-directed to design a learning experience that engages him/her in a way that best fits his or her own learning needs. Last, students are asked to express their learning in one of a variety of ways (guiding principle 3 of UDL). For example, students are not only asked to write a traditional paper, but they are asked to show what they learned to the class through the presentation of an aesthetic representation of their choice. The Student Choice project is designed to transform perceptions and build awareness through engaging students in critical reflection related to disability through immersing themselves in an applied learning experience of their choice. There are four distinct required components of this project, which include: 1) the project proposal, 2) the applied learning experience, 3) the critical reflection paper, and 4) the presentation of aesthetic expression of learning. Each of these components and their importance are discussed in more detail in the following sections.

Student Choice Project Proposal

Students are introduced to Student Choice Project and its various components during the first week of class. Students are asked to choose a project that allows them to think critically and engage with the disability community. Specifically, students are asked to try to do something new. Students are then given a deadline for submitting their project proposal for instructor approval. Students are asked to include the following in the Student Choice Project proposal: 1) a brief description of the applied learning experience that is designed by the student, 2) an explanation of why they chose their particular experience, 3) a plan for evidencing the time spent

immersed in their project, and 4) their ideas for an aesthetic representation they might create and present to their peers during the final week of the semester. The purpose of the project proposal is to guide students in thinking about and planning for their experience. However, it is important to be flexible and show willingness to allow students to change and mold their learning experiences throughout the semester.

To assist students in designing their applied learning experience, a list of project ideas is shared with students in the project guidelines, but students are not limited to completing a project on this list (see *Table 1*).

Table 1

Project Ideas

You Decide	Your choice
Spend a day	Make arrangements to spend time with an individual with an disability
Interviews	Conduct interviews with at least 5 different people who work in the special education and/or disability field. This can include teachers, community service providers; elected representatives, etc.
Hang out with a family	Spend 8-10 hours hanging out with an individual with an disability and his or her family.

- Volunteer** Spend a day volunteering at a community organization that is focused on supporting individuals with disabilities. There are thousands of possibilities.
- Community Assessment** You are to select at least three community locations (examples listed below) and evaluate their accessibility in the following areas: Physical; Language (including use by those with visual and hearing impairments and those with English as a second language); Cultural (how do those of different cultures understand the environment?); Appropriateness of environment (can the artifacts meet the needs of all?); Readability (can those with reading difficulties understand written materials and signage?); Inviting staff for all who use the environment; other (be thorough and creative). Possible locations: Museums; Churches; Shopping Centers; Theaters/Cultural productions; Transportation; Business locations; Medical providers/hospitals; Book Store; Wal-Mart/Sam's; Other locations of daily living
-

The Applied Learning Experience

The applied learning aspect of this project is primarily demonstrated through the learning experience that is individually created by each student. Students are expected to spend at least 8 hours fully immersed in an instructor approved project of their choice. Consistent with the applied learning approach to education, the experience each student creates allows them to directly apply theories and information learned throughout their introductory course (Ash & Clayton, 2009). In addition, this applied learning experience takes the student out of the traditional hierarchical role of teacher-student and creates an experience in which the student is free to get to know individuals with disabilities as humans with unique characteristics and personalities. This hierarchical role shift is a critical aspect of the applied learning experience requirements for this project, as it is believed that this type of experience will allow preservice teachers to feel less stressed and more prepared to work with individuals who have disabilities in their future classrooms (Rao & Petroff, 2011).

Given that all students bring varied background knowledge, perceptions, and general worldviews to the college classroom, the importance of choice in the creation of the applied learning experience cannot be underestimated. This aspect of the project is intentionally designed to facilitate each student's individualized creation of knowledge, providing an opportunity to intentionally create meaningful learning experiences directly applicable to each preservice teacher's future career. Moreover, by giving students to opportunity to design their own applied learning experience, each is given the freedom to answer his or her own distinctive questions, build off current understandings, clarify current misconceptions, and/or enhance knowledge

about a particular topic related to disability that has been uniquely identified as important to individual understanding.

Critical Reflection Paper

After students complete the applied learning experience, they are asked to write a traditional 4-5-page paper including details of the unique experience as well as a critical reflection of what they learned through it. Ash and Clayton (2009) remind us that critical reflection is integral to applied learning as it makes applied learning educationally meaningful. Thus, the critical reflection process for the student choice project was purposefully designed to “generate, deepen, and document learning” (Ash & Clayton, 2009). Additionally, it was hoped that with prompting to critically reflect after this applied learning experience, students would articulate questions, confront bias, examine causality, contrast theory with practice, point to systematic issues, challenge simplistic conclusions, invite alternative perspectives, and produce tangible descriptions of new understandings related to individuals with disabilities and teaching these individuals in their future classrooms (Ash & Clayton, 2009; Ash & Clayton, 2009a and 2009b).

Presentation of Aesthetic Expression of Learning

During the last week of the semester students present an aesthetic representation of their critical reflection (e.g. what they learned from their project). Students are expected to aesthetically represent not what they did, but what they learned, in an original, fun, and creative way. The guidelines for the student choice project offer students several ideas for possible aesthetic representations, such as creating a movie, sculpture, drawing, collage, or a book. However, students are not limited to the list of ideas outlined in the project guidelines.

Anderson and Krathwhol (2001) remind us that the act of “creating” is one of the most complex levels of thinking. Aesthetic expressions of learning foster learner’s creating. Creative projects have shown to develop self-awareness (Shapiro et al., 2006) and increase rigor while also deepening understandings of course content and honoring students’ individual strengths and experiences (Crim, Kennedy, & Thornton, 2013; Cuero et al., 2008; Cuero & Crim, 2008; Eisner, 1997). Thus, the aesthetic expression of learning component of the Student Choice Project was purposefully included to facilitate student reflections and discussion of their learning go beyond surface level considerations, and to assist students in making connections to their own growth as educators, as people, and as advocates. Although further study is needed, it is our belief that the presentation of students’ aesthetic expressions of learning facilitates classroom discussion that are richer and have more depth. We believe the aesthetic representation creates a platform for discussion, making it easier for students to discuss concepts and personal insights.

Student Choice Project Example

In the following sections, we provide an example of how one student completed the components of the Student Choice Project. This example demonstrates the process for completion and how this project facilitated transformation of student perceptions, built awareness, and improved openness and objectivity in understanding individuals with disabilities. To maintain student confidentiality, we use a fictitious name when sharing this example.

Student Choice Project Example: Alex

Project proposal. Alex proposed to spend time in a special education classroom. She chose a low incidence classroom where the teacher was a fairly recent Kansas Horizon Award Winner. She explained that she had been in many classrooms throughout her life, but they were

all general education classrooms. She had seen accommodations and modifications in the general education setting, but she had come to the realization that she had no idea what happened when children were pulled from the classroom to receive other services. She was interested to know how her students might be spending their time while not in her class. Alex hypothesized that this experience would help her better understand them and their daily routine, as well as expose her to teaching strategies and practices which could help her become a better teacher.

Specifically, Alex proposed to spend all day on a Monday, as well as one Friday afternoon in the low-incidence special education classroom. Alex chosen to spend the full day in the classroom on Monday because it would be a “typical” day with a relatively normal schedule. She chose to also spend Friday afternoon in the classroom because this was when the teacher invited students from the general education classroom to participate in a cooking group with his class. Alex planned to document her experience with pictures. In her instructor feedback, Alex was alerted that some students are not allowed to have photos taken, and that this may not be a viable option due to Family Education Rights and Privacy Acts. Thus, Alex’s instructor recommended that she decide on a different means of documentation.

For her proposed aesthetic representation, Alex was undecided. She had vague ideas of a collage or poster, but she remained unsure how to represent what she learned as she acknowledged the fact that she had yet to learn it. She did muse that she would like to return to her experience just before the presentation portion of her project, cook with the group again, and then perhaps bring some of the treats to share with her peers. Alex’s instructor reminded her that showing what she did was different than representing what was learned and that she needed to be sure her aesthetic representation expressed her learning.

The applied learning experience. Alex spent a typical school day in her proposed classroom. She found that students in the classroom had a variety of disabilities, which was different than what she had expected. She noted that students were not in the classroom full-time, and were “coming and going from the room constantly”. She saw that the students came from different teachers, despite being in the same grade, and began to draw the conclusion that maintaining 10 schedules was a task she had not considered as part of the special education teacher’s job. In the classroom, she was introduced to visual schedules and social skills games. Alex also observed academic instruction in math and reading. She saw accommodations and individualizations for these areas as well as those made for behavior issues. Alex was able to see children communicate using Augmentative and alternative communication devices (AAC), and she saw the classroom designed to facilitate naturalistic practice of communication skills. She was keen to note the way the teacher communicated with other professionals and the necessity therein. These observations were noted in her critical reflection paper, and they were further explained for their value and connection to her learning and future as a classroom teacher.

Critical reflection paper. Alex’s critical reflection paper was filled with a heartfelt and sincere reflection on her experience. In six short pages of double spaced text, she was able to describe in detail her feelings and expectations before the project, clearly detail her time spent immersed in the experience, apply her knowledge from class to what she saw, and critically analyze her own thoughts and emotions.

To start, Alex simply reflected on her expectations of the project. As in her proposal, she was hoping to see teaching strategies and practices she may not otherwise be exposed to that would help her become a better teacher. She noted early, that her perception of what happens

with student scheduling was very one-sided. She realized as one student leaves her room, he or she must be arriving at another teacher's room. Truly, she had never considered how that looks on the other end or the coordination it must take to allow instruction to work on an individualized level and still fit with everyone's schedules. Alex realized communication with students, family, and staff is key to the success of all students.

The next realization for Alex came upon reflecting on her reaction to math and reading instruction, she stated:

I don't know why, but I was surprised that they did math and reading. I guess in my head when I imagined what they did in the special education classroom, I kind of thought circle time activities and spending time dealing with behavior problems would be the extent of their day.

She saw strategies being used such as manipulatives as well as extra time and shortened assignments, and she saw children reading on grade level, such that she stated:

Most of the students were very bright. I guess I probably had some preconceived notions going in that the students would be very slow or not understand very much, but I was completely wrong...I was amazed...I guess overall I was just surprised at how bright the students were.

In conclusion, Alex was pleased with her choice of experience. She felt she had a better understanding of the daily activities of a students in special education, thus meeting her original goal. Additionally, she felt she had a better understanding of this particular population of students with disabilities. Alex concluded her critical reflection with the following:

I am very open-minded and I've said it a million times, "children with special needs are just like all the other kids; they are all just kids." But, I didn't realize in the back of my mind I still must have been judging them and expecting them to be, not dumb [sic], but just slower. This experience opened my eyes to really see that students with special needs really, truly are kids just like all the other kids.

Presentation of aesthetic expression of learning. Alex originally chose to focus on the communication aspect of her experience. She designed a fan of line drawings surrounding a cell phone. Each line drawing was connected to a stick, and each stick was one of a variety of colors (see Figure 1). Alex explained to the class during her presentation that this was meant to show her understanding that communication comes from any direction, can take any form, and looks different for each student. The amount of communication needing to take place between so many different people in order to give students the best opportunities for success made an immediate impact on her. However, after further reflection, Alex began thinking that her first representation was more about her future teaching and was not a critical analysis of herself, her interactions, and what she learned.



Figure 1. Alex's first aesthetic expression of learning

Alex stated that she reflected further and realized that it was a surprise and unexpected when she saw the students with disabilities as being capable and bright. She decided this was her biggest revelation, and she would need to reconstruct her project. Thus, Alex ended up creating a second aesthetic expression of her learning, which was a large silver board with the word joy in lights (see Figure 2).

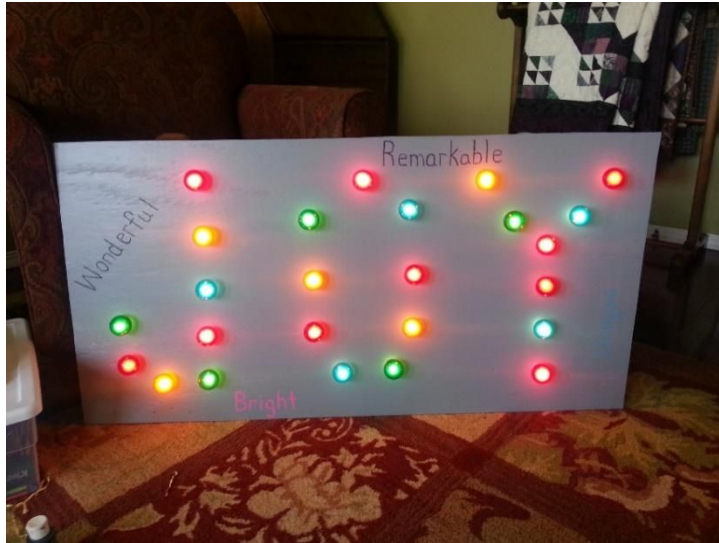


Figure 2. Alex's second aesthetic expression of learning

Alex noted that her biggest realization came when she was thinking to herself how “bright” the students were. As discussed earlier, she then had to reflect that her surprise in this matter meant that somewhere, she held the belief that this was not a possibility for these children. She wanted her second project to be bright, not just in color spectrum, but really bright. This way, it would shine with no doubt. She chose the word “joy” because she saw that the children in the class and how they enjoyed school. She wanted everyone to know, that the classroom was a happy place. The children were happy to be there. Peers were happy to visit. The brightness and the joy “came through” to her, and she found herself now realizing she had to learn that what she had always thought she had believed, was something she had to be shown.

Conclusion

This paper shares an innovative student choice project, grounded in the principles Universal Design for Learning completed by undergraduate students in an introductory course about disability and special education. The student choice project was intentionally designed to enhance the preparation of preservice general education teachers to increase readiness to work with students with disabilities in inclusive classrooms. More specifically, the objective of the project was to transform perceptions and build awareness through engaging students in an applied learning experience of their choice and discussions of critical reflections derived from the experience.

The applied learning experience chosen and individually designed by each student resulted in differentiated learning. As intended, each student learned something different and unique, enhancing their own personal understanding while creating meaningful connections for each individual. Students appreciated the opportunity to be self-directed in their choice of project as it applied to personal interests and strengths. In addition, this applied learning experience placed students outside of the traditional teacher-student hierarchical role, while giving them direct experience with an individual with a disability or insight into the disability community.

It is evident that this project had dramatic changes in student perceptions. Primarily, the project deconstructed disability in that it assisted students in seeing individuals with disabilities as people and less as a label, a disability or a problem to be fixed. It created a way for students to interact with individuals in a person-centered way to see that they are people and not project or puzzles to be figured out. From discussions with students and preliminary analysis of data, we

predict that these preservice teachers will feel more at ease as educators in inclusive classrooms in the future.

This project collectively, through the freedom to choose and critically reflect through the presentation of an aesthetic expression of learning, facilitated a unique platform for students to be more open to discussing their learning at a deeper level. The creativity required in completing the aesthetic expression of learning prepared students for having discussions about their feelings, biases, and their own constructions of meaning and worldviews. We believe there is much more to understand about how creativity fosters reflective thinking. Future studies might consider comparing the quality of student reflections and discussion with and without aesthetic expression of learning requirements.

Our goal through writing this paper is that other university teaching faculty might consider similar projects that facilitate applied learning experiences in order to enhance the preparation of preservice general education teachers in teaching students with disabilities. Although more rigorous study is needed to determine if this project improves actual levels of readiness for teaching in future inclusive classrooms, we believe the project examples we have shared demonstrate the likelihood that preservice teachers will be better prepared.

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