

# Using Creativity to Help Students Learn About and Solve Diversity-Related Problems

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## Abstract

Diversity issues are an everyday concern in the workplace and society in general. Recognizing the relevance of diversity, career success will require that students have the skills necessary for effectively dealing with diversity-related problems. To facilitate this endeavor, the author developed a multidisciplinary Diversity Model Project. The project was designed to help students use creative problem solving to learn about diversity issues and create a physical model representing solutions for those problems. In the paper, the author described the major components of the Diversity Model Project. The paper identified the benefits derived from using the Project as a way to learn about diversity issues and develop solutions for those concerns. In addition to evaluating the various components of the Project, including the physical model of the solution, the author also administered a Pretest and Posttest. Also, the paper provided guidelines that can be used by engineering, technology and business faculty to develop similar multidisciplinary learning projects to facilitate student understanding of diversity-related concerns.

## Keywords

Diversity 1, Diversity Brief 2, Diversity Model Project (DMP) 3, Creative Problem Solving 4.

## 1. Introduction

Diversity-related concerns involve issues that students are dealing with today and will continue to affect their personal and professional lives in the future (Ocon 2006; Reilly 2021). After they graduate, career success for most students will require that they have an understanding of diversity issues and have the skills for effectively resolving those concerns. Therefore, it important for faculty to help students develop the skills for resolving diversity-related concerns (Ocon 2006; Reilly 2021).

For years, the author experimented with taking a multidisciplinary learning approach in some of the courses he teaches (Ocon 2019; Ocon 2020). Combining concepts, problem-solving approaches and solutions in different courses he taught led to the discovery that creativity or creative problem solving can be used to help students solve a multitude of problems in various disciplines. Despite the tendency to associate creativity with only the arts, such as painting, dancing, acting and music (Taylor 2013), the author persevered in applying it to disciplines outside the arts, such as engineering, technology or business situations. This led him to envision ways for students to use their creativity in other courses he teaches.

Through research and experience, the author developed a Diversity Model Project (DMP), which combined creative problem-solving with diversity management, in order to deal with a variety of diversity issues. Relying on his experience from previous multidisciplinary learning projects, the author used components from those projects to develop a project designed to help students use creativity to learn about various diversity concerns and develop physical models of solutions for those concerns (Ocon 2019; Ocon 2020). Table 1 lists why understanding and resolving diversity issues is important for students (Ocon 2006; De Janasz 2015; Wahba 2021).

Table 1. Why diversity understanding is importance for students

1. Promotes proactive behavior by creating awareness of diversity issues and concerns
2. Promotes individualism

3. Recognition that different thinking styles can promote creative and innovative thinking
4. Recognition that different thinking styles can improve decision making and problem solving
5. Avoids or limits employment discrimination complaints and lawsuits
6. Recognition of diversity as a business resource or advantage which can help organizations to effectively compete in the global economy
7. Establishes personal pride associated with ethnic identity and cultural heritage
8. Promotes a management style that is conducive with a diverse workforce
9. Improves teambuilding and the ability to work with diverse co-workers
10. Recognition of diversity as a legitimate business issue and part of strategic planning
11. Promotes communication and relationship development among diverse co-workers
12. Promotes social responsibility and ethical behavior by encouraging fair and equitable treatment for everyone
13. Creates acceptance of people without regard to race, culture, gender or other differentiating characteristics

## 2. Benefits of the Diversity Model Project (DMP)

The DMP is a multidisciplinary learning project that uses creative problem solving to deal with diversity issues. Table 2 lists some of the major benefits students derived from the DMP (Ocon 2019; Lumsdaine et al. 1999; Isaksen et al. 2011; Zielinski 2018; Black 1995).

Table 2. Benefits derived from the diversity model project

<ul style="list-style-type: none"> <li>• An effective way to learn about diversity issues</li> </ul>
<ul style="list-style-type: none"> <li>• Highlights the importance of building a physical model to promote the understanding of diversity and solutions to diversity concerns</li> </ul>
<ul style="list-style-type: none"> <li>• Encourages students to take personal responsibility for their behavior toward persons of diversity</li> </ul>
<ul style="list-style-type: none"> <li>• Helps students recognize the importance of diversity in their personal and professional lives</li> </ul>
<ul style="list-style-type: none"> <li>• Promotes the use of incubation, intuition, sketching and visualization for understanding and/or developing ideas for problem solving</li> </ul>
<ul style="list-style-type: none"> <li>• Students recognize that everyone has creative potential/ability</li> </ul>
<ul style="list-style-type: none"> <li>• Promotes the use/familiarity with idea generation techniques for problem solving</li> </ul>
<ul style="list-style-type: none"> <li>• Highlights the use of multidisciplinary learning: creativity and diversity</li> </ul>
<ul style="list-style-type: none"> <li>• Promotes the importance of developing creative thinking skills for career success</li> </ul>
<ul style="list-style-type: none"> <li>• Promotes the search for multiple solutions for problems</li> </ul>
<ul style="list-style-type: none"> <li>• Students recognize that creative thinking skills can promote the understanding of diversity issues</li> </ul>
<ul style="list-style-type: none"> <li>• Allows students to use their imaginations to learn about diversity</li> </ul>
<ul style="list-style-type: none"> <li>• Encourages learning about diversity by making the class environment more interesting</li> </ul>
<ul style="list-style-type: none"> <li>• Students have the opportunity to use and develop their communication skills</li> </ul>
<ul style="list-style-type: none"> <li>• Similar projects/assignments can be used with most courses</li> </ul>

## 3. The Diversity Model Project

The DMP was organized along a pattern developed by the author with previous projects. “Accordingly, the DMP was composed of 3 primary components that were designed to complement and reinforce each other to help students develop an understanding of diversity issues (Ocon 2019; Ocon 2020).” There were two course delivery modes used with the DMP. During the Fall 2020, the course delivery mode was a hybrid version of the course and the course delivery mode for the Spring 2021, was a fully online version of the course.

“Students were constantly reminded of the Project, since the different components were due at different times during the semester (Merrick 2019). The due dates for the components followed (an established) pattern for projects the author used in the past.” For example:

- “During the first 8-10 weeks of the semester, students learned about (diversity), creativity and the Creative Problem Solving Process (Ocon 2006; De Janasz 2019; Lumsdaine et al. 1999; Isaksen et al. 2011; Yovich

1997). As the semester progressed, students were required to submit the components of the Project at different times. The Diversity Brief was due in Week 10, photos of the Diversity Model in Week 12 and the PowerPoint Presentations on the DMP in Week 13.”

- “Students evaluated each component (Brief, Model, and Presentation) of the Project, along with giving feedback on the Project in general (Ocon 2019; Ocon 2020).” Tables 6-10 provide a summary of student responses to selected questions related to the Project (components).

The author assigned each student to a diversity issue for their DMP. Table 3 lists examples of diversity issues.

Table 3: Examples of diversity issues/concerns

Diversity Issues/Concerns
1. How to increase women in leadership positions?
2. How to manage different generations of employees?
3. How to avoid/limit sexual harassment?
4. How to implement/enforce the Americans with Disabilities Act?
5. How to avoid/limit age discrimination?
6. How to avoid/limit religion discrimination?
7. How to ensure/enforce Equal Employment Opportunity?
8. How to implement the Family Medical Leave Act?
9. How to implement Affirmative Action?
10. How to implement ethical behavior in the workplace (as it relates to diversity)?
11. How to avoid/limit violations of the Pregnancy Discrimination Act?
12. How to ensure/enforce the Equal Pay Act?
13. How to manage workplace romances?
14. How to avoid/limit LGBTQ discrimination?
15. How to avoid/limit sex discrimination?
16. How to improve recruiting for a diverse workforce?
17. How avoid/limit stereotyping and/or prejudice in the workplace?
18. How to promote the understanding of cultural values?
19. How to improve cross-cultural communication?
20. How to manage diversity related conflicts?
21. How to achieve/promote multicultural leadership?
22. How to achieve/manage multicultural teams/teambuilding?
23. How to implement a workplace diversity program?
24. How to avoid/limit ethnocentrism?
25. How to avoid/limit national origin discrimination?
26. How to avoid/limit reverse discrimination?

### 3.1 Diversity brief

“A major component of the DMP was for students to develop a Diversity Brief. A brief is problem solving tool the author used with many of his projects. The brief encouraged students to think about and incubate their assigned diversity issue, and plan the creation of the model and presentation. The author distributed a handout to students which defined and described the purpose of the Diversity Brief. The handout stated that the brief was a creative thinking tool that problem-solvers use to: (1) begin the process of solving a problem (2) stimulate the imagination for creative ideas, and (3) develop and organize ideas for finding solutions. Putting thoughts/ideas into a written brief is an effective way to improve ideas and follow through on solving problems (Makdisi and Makdisi 2009). Table 4 lists the 12 components of a Diversity Brief (Ocon 2019; Ocon 2020).”

Table 4. The 12 components of the diversity brief

1. Provide a creative title for the solution to the diversity issue/concern
2. Background information on the diversity issue/concern
3. Explain why a solution to the diversity issue/concern is important today
4. Describe the solution for the diversity issue/concern
5. How can the solution for the diversity issue/concern be achieved/implemented in the workplace

6. The “Problem as Stated”
7. The “Problem as Understood”
8. A written description of the 3-D Model the student is constructing
9. What was the alternative idea for constructing a model of the diversity solution
10. Identify the main idea generation technique(s) used/to be used to stimulate your imagination for the model
11. A sketch of the 3-D Model
12. How can the Brief be improved

### **3.2 Diversity model**

“The second major component of the DMP required students to use their creativity to build a physical model on their diversity solution. Building a model encouraged students to continuously think about their diversity issue throughout the semester (Merrick 2019). The model reinforced the understanding of the diversity issues, while complementing the other components of the Project. From past experience, the author recognized the importance of providing students with some structure, such as by limiting the size of the model and construction materials to be used when building the model. At the same time, these limitations allowed for consistent criteria that helped the author when grading the Project. The model had to be: (1) constructed (at least 70%) of Play-Doh or modeling dough and (2) limited in size, not to exceed 8 inches (height), by 8 inches (width), by 8 inches (length) (Ocon 2019; Ocon 2020).”

### **3.3 PowerPoint presentation**

The last major component of the DMP was a 5-minute PowerPoint Presentation. Students were required to provide a video presentation and describe the diversity issue and model. The presentation component of the Project was designed to reinforce and complement the understanding of the assigned diversity issue.

## **4. Methodology and Assessment of the Diversity Model Project**

The effectiveness of the DMP was determined by using a variety of assessment tools. The type of assessment instruments used to evaluate the project were used by the author to evaluate previous projects (Ocon 2019; Ocon 2020). Over the course of 2 semesters (Fall 2020 and Spring 2021) the major components of the Project were evaluated on how effective they were in promoting the understanding of diversity issues. Additionally, students were also given a pretest at the beginning of the semester and posttest at the end of the course.

The author used a different scale for assessing the effectiveness of the various components of the DMP. Although all the components (Brief, Model, and Presentation) were equally important, the author viewed the Briefs as both a way to assess the understanding of diversity issues and as a means or process for achieving the end result, improving (and demonstrating) student understanding of diversity issues. The end result of the Project was demonstrated through the model and presentation.

- Hypothesis 1 (Model & Presentation): The implementation of the Diversity Model Project will result in an increase in student understanding of diversity issues. The average rating results, over 2 semesters, for the model and presentation components of the DMP on a scale from 1 (strongly disagree) - 5 (strongly agree) will be  $\geq 4$  (agree) on selective questions. A rating result of  $\leq 3$  (neither agree nor disagree) on any (model or presentation) component criteria would be unacceptable.
- Hypothesis 2 (Briefs): The implementation of the Diversity Model Project will result in an increase in student understanding of diversity issues. The average rating results, over 2 semesters, for the Brief components of the DMP on a scale from 1 (strongly disagree) - 5 (strongly agree) will be  $\geq 3.6$  (90% of 4.0 = agree) on selective questions. A rating result of  $\leq 3$  (neither agree nor disagree) on any (Brief) component criteria would be unacceptable.
- Hypothesis 3 (Pretest & Posttest): The test results, over 2 semesters, from the average Pretest scores compared to the average Posttest scores will be  $\geq 5\%$  increase on selective questions. Any rating result of  $< 5\%$  increase on the Posttest would be unacceptable.

### **4.1 Diversity brief-1 assessments**

“As was true with previous projects, the author evaluated the Briefs using two different assessments. The reason the Diversity Brief was evaluated twice reflected the importance for students getting off to a good start on the Project (Makdisi and Makdisi 2009). The first Diversity Brief (Brief-1) assessment focused on the different components of the Brief, as they related to promoting diversity understanding and the development of the model. The second Brief (Brief-2) compared the effectiveness of the Brief with the other two components (Model and PowerPoint Presentation) of the Project. Table 5 lists selected questions on the Diversity Brief-1 (Ocon 2019; Ocon 2020).”

Table 5. Selected questions on the diversity brief-1

Question 1: Background information on the diversity issue/concern- is important in promoting diversity understanding, imagination and/or creative problem solving
Question 2: Explain why a solution to the diversity issue/concern is important- is important in promoting diversity understanding, imagination and/or creative problem solving
Question 3: Describe the solution for the diversity issue/concern- is important in promoting diversity understanding, imagination and/or creative problem solving
Question 4: How the solution for the diversity issue/concern will be achieved/implemented- is important in promoting diversity understanding, imagination and/or creative problem solving
Question 5: A sketch (the best idea) of the 3-D model- is important in promoting diversity understanding, imagination, and/or creative problem solving.

Table 6 provides a summary and comparison of student responses, over 2 semesters, to selected questions on the components of the Diversity Brief-1 for promoting diversity understanding.

Table 6. Two semester summary and comparison to selected questions on the components of the diversity brief-1 in promoting diversity understanding

Class XXXX (Fall 2020 and Spring 2021)	D-Brief (F20)	D-Brief (S21)	D-Briefs (F20 and S21)
Scale: 1. Strongly Disagree, 2. Disagree, 3. Neither Agree/Disagree, 4. Agree, 5. Strongly Agree	Average Score	Average Score	2 Semester Average Score
Question 1-Background	4.00	4.57	4.29
Question 2-Importance	4.31	4.53	4.42
Question 3-Solution	4.07	4.67	4.37
Question 4-Implement	3.93	4.67	4.30
Question 5-Sketch	3.60	3.60	3.60
Number of Students	15	30	23

Table 6 showed that the average score, over 2 semesters, for the 5 selected questions on the Diversity Brief-1 components was 3.6 and over. A score of 3.6 was within the stated hypothesis. None of the scores in either semester had an unacceptable score of 3.0 or less. Based on the student responses to the Brief’s evaluation of its components, the author concluded that the Brief-1 was effective in promoting student understanding of diversity issues.

#### 4.2 Selected questions applied to the brief-2, model and presentation

The author evaluated the Brief-2, Model and Presentation using selected questions listed in Table 7. The questions in Table 7 were applied for the assessments of the Brief-2, Model and Presentation in Tables 8-10.

Table 7. Selected questions applied to the assessments for tables 8-10

1. Allowed me to express my creativity
2. Allowed me to use the sketch to better understand diversity issues/concerns and/or generate ideas for the DMP
3. Allowed me to use the steps or phases in the Creative Problem Solving Process
4. Seeing and/or physically examining the diversity model allowed me to better understand the diversity issues/concerns and generate ideas for completing the project
5. Made it relatively easy for me to understand diversity issues/concerns and generate creative ideas for completing the DMP

6. Allowed me to use my imagination when generating ideas for completing the DMP
7. Allowed the use of visualization to help me to better understand the diversity issues/concerns and/or generate ideas for completing the DM project
8. Allowed me to become familiar with different diversity issues/concerns
9. Improved my understanding of diversity issues/concerns
10. Provided an interesting way to learn about diversity issues/concerns
11. Improved my understanding of creative problem solving
12. Provided an interesting way to learn about creative problem solving
13. The DM project is relevant for my career

### 4.3 Evaluation of the diversity brief-2

Table 8 provides a summary and comparison of student responses, over 2 semesters, to selected questions on the Brief-2 in promoting diversity understanding.

Table 8. Two semester summary and comparison of student responses to selected questions on the brief-2 in promoting diversity understanding

Class XXXX (Fall 2020 and Spring 2021)	D-Brief (F20)	D-Brief (S21)	D-Brief (F20 and S21)
Scale: 1. Strongly Disagree, 2. Disagree, 3. Neither Agree/Disagree, 4. Agree, 5. Strongly Agree	Average Score	Average Score	2 Semester Average Score
Question 1-Express	3.50	4.10	3.8
Question 2-Sketch	3.79	3.97	3.88
Question 3-Phases	4.21	4.17	4.19
Question 4-See	3.50	3.97	3.74
Question 5-Understand	3.86	4.27	4.07
Question 6-Imagination	3.86	4.27	4.07
Question 7-Visualize	3.86	4.10	3.98
Question 8-Familiar	3.93	4.03	3.98
Question 9-Understand	4.21	4.37	4.29
Question 10-Interesting	4.0	4.21	4.11
Question 11-Understand	3.93	4.31	4.12
Question 12-Interesting	3.71	4.21	3.96
Question 13-Relevant	3.57	3.68	3.63
Number of students	14	30	22

Table 8 showed that for 11 of the 13 selected questions the average score, over 2 semesters, for the Diversity Brief-2 components was greater than 3.6. A score of 3.6 was within the stated hypothesis. There were two questions with average scores below 3.6 (Question 1 was 3.50 and Question 13 was 3.57) - however, the difference from 3.6 was negligible. None of the scores in either semester had an unacceptable score of 3.0 or less. Based on student responses, the author concluded that the Diversity Brief-2 was effective in promoting student understanding of diversity issues.

### 4.4 Diversity model

Table 9 provides a summary and comparison of student responses, over 2 semesters, to selected questions on the Physical Model in promoting diversity understanding.

Table 9. Two semester summary and comparison to selected questions on the model in promoting diversity understanding

Class XXXX (Fall 2020 and Spring 2021)	D-Model (F20)	D-Model (S21)	D-Model (F20 and S21)
Scale: 1. Strongly Disagree, 2. Disagree, 3. Neither Agree/Disagree, 4. Agree, 5. Strongly Agree	Average Score	Average Score	2 Semester Average Score
Question 1-Express	4.29	4.56	4.43
Question 2-Sketch	3.79	4.14	3.97
Question 3-Phrases	3.64	4.14	3.89
Question 4-See	3.86	3.97	3.92
Question 5-Understand	3.93	4.10	4.02
Question 6-Imagination	4.14	4.6	4.37
Question 7-Visualize	4.07	4.67	4.37
Question 8-Familiar	3.79	3.9	3.85
Question 9-Understand	4.0	4.33	4.17
Question 10-Interesting	4.07	4.52	4.29
Question 11-Understand	4.14	4.48	4.31
Question 12-Interesting	4.57	4.45	4.51
Question 13-Relevant	4.0	3.66	3.83
Number of students	14	30	22

Table 9 showed that the average score, over 2 semesters, for selected questions on the Diversity Model components was over 4.0 (with the exception of Questions 2, 3, 4, 8 and 13). A score of 4.0 was within the stated hypothesis. However, the average score for Questions 2, 3, 4, 8 and 13, over 2 semesters, was  $\geq 3.83$  (any difference in scores for those questions was insignificant compared to 4.0). None of the scores in either semester had an unacceptable score of 3.0 or less. Based on the student responses, the author concluded that the Diversity Model component was effective in promoting student understanding of diversity issues.

#### **4.5 PowerPoint ethical presentation**

Table 10 provides a summary and comparison of student responses, over 2 semesters, to selected questions on the PowerPoint Presentation in promoting diversity understanding.

Table 10. Two semester summary and comparison of student responses to selected questions on the presentation in promoting diversity understanding

Class XXXX (Fall 2020 and Spring 2021)	Presentation (F20)	Presentation (S21)	Presentation (F20 and S21)
Scale: 1. Strongly Disagree, 2. Disagree, 3. Neither Agree/Disagree, 4. Agree, 5. Strongly Agree	Average Score	Average Score	2 Semester Average Score
Question 1-Express	4.07	4.17	4.12
Question 2-Sketch	3.86	3.86	3.86
Question 3-Phases	3.86	4.17	4.02
Question 4-See	3.79	4.07	3.93
Question 5-Understand	4.21	4.35	4.28
Question 6-Imagine	4.07	4.13	4.10
Question 7-Visualize	3.93	4.20	4.07
Question 8-Familiar	3.86	3.83	3.85
Question 9-Understand	4.43	4.14	4.29
Question 10 –Interest	4.29	4.24	4.27

Question 11-Understand	4.07	4.35	4.21
Question 12-Interest	4.07	4.14	4.11
Question 13-Relevant	3.79	3.72	3.76
Number of students	14	30	22

Table 10 showed that the average score, over 2 semesters, for selected questions on the PowerPoint Presentation component was over 4.0 (with the exception of Questions 2, 4, 8, and 13). A score of 4.0 was within the stated hypothesis. However, the average score for Questions 2, 4, 8 and 13, over 2 semesters was  $\geq 3.76$  (any difference in scores for those questions was insignificant compared to 4.0). None of the scores in either semester had an unacceptable score of 3.0 or less. Based on the student responses, the author concluded that the PowerPoint Presentation component was effective in promoting student understanding of diversity issues.

## 5. Pretest and posttest

As previously stated, each semester the author administered a true/false Pretest on diversity and creative problem solving at the beginning of the semester and Posttest at the end of the semester. The pretest and posttest were intended to measure the before and after situations for student learning. Table 11 lists selected True/False Questions for the Pretest and Posttest (Ocon 2019; Ocon 2020).

Table 11. List of selected true/false questions for the pretest and posttest.

1. Most people remember and/or understand what they see better than what they hear
2. Humor and play should be avoided when we are generating ideas to help solve problems
3. Diversity issues are important to me
4. When dealing with diversity issues/concerns, we should follow this philosophy. "if it's not broke-don't fix it"
5. It is easier to turn wild/unusual ideas into practical solutions than to turn routine/obvious ideas into innovative solutions
6. Creativity is a personal characteristic that only a select few possess
7. Sketching is an effective creative problem solving tool
8. Creative thinking skills can promote the understanding of ethics
9. Creativity is a process involving a sequence of several steps or phases
10. Most people understand a problem or situation better if they can physically see and examine or touch it, instead of just thinking about the problem
11. Creative thinking skills can promote the solving of diversity problems/concerns
12. Behaving socially responsible/ethically is important for career success
13. The U.S. represents 5% or more of the world's population
14. Incubating an idea is not an effective way to understand and/or develop ideas
15. Visualization is an effective way to understand and solve problems
16. I am familiar with at least 3 idea generation techniques
17. When solving problems or making decisions we should avoid using intuition
18. After finding a good solution to a problem, we should avoid looking for additional solutions for that problem
19. Having creative thinking skills are important for career success
20. Most people will experience a diversity related dilemma sometime during their career
21. Prejudicial attitude and stereotype belief are learned
22. In the U.S., women are a minority group
23. To promote diversity, organizations should attempt to create an inclusive work environment
24. When interacting with people of other cultures, we should treat them as we would like to be treated

The Pretest and Posttest scores indicated a consistent pattern of results. The average change, over 2 semesters, from the Pretest to the Posttest was a positive 6 percentage points or 7% increase (from 81% to 87%). The percent of correct responses to selected questions from the Pretest and Posttest are shown in Table 12.

Table 12. Results from the pretest and posttest over 2 semesters

Semester	Fall 2020	Spring 2021	2 Semester Average (Fall 2020 and Spring 2021)
Pretest	78% correct	83% correct	81%
# of Students	14 students	36 students	25 students
Posttest	84%	90% correct	87%
# of Students	15 students	31 students	23 students

## **6. Guidelines for faculty on developing similar projects/assignments to facilitate diversity understanding**

To create the DMP, the author relied on guidelines he developed from previous multidisciplinary learning projects. As a result, the author provided the following guidelines to assist other faculty in developing (multidisciplinary learning) diversity projects/assignments (Ocon 2019; Ocon 2020).

### **6.1 Integrate diversity related issues as a component of other assignments**

“An understanding of diversity issues has become an important component for career success for all graduates (Ocon 2006; Puccio et al. 2016; Tyler 2019). Also, to reflect today’s workplace, many class projects/assignments for engineering, technology and business students involve problem solving situations (Lumsdaine et al. 1999; Puccio et al. 2011). As a result, there exist ample opportunities for faculty to incorporate diversity issues as part of other class assignments. Considering the nature of jobs and job assignments, diversity issues will continue to be common occurrences for future graduates. Consequently, integrating diversity issues into problem solving projects/assignments should be a relatively straightforward modification for most courses (Ocon 2019; Ocon 2020).”

### **6.2 Explain why understanding diversity is important**

“Sometimes faculty need to explain to students the importance of a given assignment. Some students may not recognize that career success is contingent on developing diversity related skills (Ocon 2006; Reilly 20221; Tyler 2019). Faculty can use the reasons stated in Table 1 (why diversity understanding is important) to explain to students why developing skills for dealing with diversity related issues are important (Ocon 2019; Ocon 2020).”

### **6.3 Provide students with a list of diversity related issues to choose from**

“As common as diversity issues are, some students may not recognize diversity related situations. Therefore, providing students with a list of diversity related issues to consider, discuss and/or research can facilitate the understanding and application of diversity related problem solving. Faculty can use Table 3 (list of diversity issues) to show examples of diversity related issues (Ocon 2019; Ocon 2020).”

### **6.4 Develop ways to assess the integration of diversity related issues**

“As is true with any change in curriculum, faculty need to assess the success of the integration of diversity issues into a course and make improvements where needed. Examples of assessment instruments can include those that were described in this paper: Pretest and Posttest, and student surveys to evaluation different components of individual projects/assignments (Ocon 2019; Ocon 2020).”

## **7. Conclusion**

Diversity-related concerns will continue to affect students in both their personal lives and the workplace. Therefore, it’s important for students to have an understanding of diversity issues and the skills for effectively resolving those concerns. As a result, the author developed a multidisciplinary learning project which combined creative problem-solving with diversity issues. Relying on his previous experience with multidisciplinary learning projects, the author

used components from those projects to create a Diversity Model Project to help students use creativity to learn about diversity and build physical models of the creative solutions to diversity issues.

Based on the assessment results, the overall conclusion was that the Diversity Model Project was an effective multidisciplinary learning project that allowed students to use creativity to promote increased understanding of diversity issues. “In the paper, the author described the major components of the Project. The paper identified the benefits derived from using the Project as a way to learn about creativity and diversity. Finally, the paper contained guidelines that can be used by other engineering, technology and business faculty to develop similar projects or assignments (Ocon 2019; Ocon 2020).”

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## Biography

**Ralph Ocon** is a Professor in the Department of Construction Science and Organizational Leadership at Purdue University Northwest, Hammond, Indiana, USA. He has a B.A. in Education, M.A. in Teaching Economics., and M.S. in Management from Purdue University in West Lafayette, Indiana, in addition to a law degree from Indiana University in Bloomington, Indiana. Professor Ocon teaches courses in creative problem-solving, leadership, and diversity management. From 1983-1990, Professor Ocon was the Director of the Center for Economic Education, and from 1990- 2002, he served as the university’s Equal Employment Opportunity Officer.