

Integrating Knowledge and Practice in a Social Work Senior Capstone Class

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Abstract

Many universities require that seniors complete a capstone course or similar culminating experience. This course was designed to help social work students integrate their classroom learning with their practicum experience through the development of a poster presentation. Forty-one students completed the capstone class in 2018. In order to evaluate the effectiveness of the course, three of the social work profession's core competencies were assessed through the course assignments. Results indicated that students had achieved competency in the areas assessed. Students reported that the final poster helped them integrate their learning with their practice.

Background

- Senior Capstone courses are often required (Berrett, 2012)
- Social work students complete a year-long practicum at a social welfare agency
- Accrediting body considers practicum to be the culminating experience
- Research project may not be the best way for social work students or similar disciplines to demonstrate their learning (Berrett, 2012)

Purpose

- To help social work students integrate their classroom learning with practicum experience
- To scaffold assignments in order to develop an integrated final poster

Sample

- 41 senior social work students at Eastern Washington University
- Majority female
- 30% Latinx
- Majority plan to attend graduate school to earn a Master's in Social Work (MSW)

Methods

- 10 week course
- Integration of classroom and experiential learning using scaffolding
- Focused on core competencies
 1. Engage in career-long learning
 2. Make ethical decisions and apply strategies of ethical reasoning
 3. Integrate multiple sources of knowledge
 4. Demonstrate effective communication
 5. Analyze, formulate, and advocate for policies
- Rated on a scale of 1-5
- Based on the quality and content of the assignments
- Assignments
 - Ethics Discussion Group
 - Ethical Dilemma Assignment
 - Research Integration Assignment
 - Policy Analysis Assignment
 - Final Poster Presentation



Results

Average Ratings

Resolving ethical dilemmas using the Code of Ethics-4.3
Apply a strategy of ethical reasoning to arrive at principled decisions-4.3
Engage in career-long learning-4.8

Student Comments

"I liked how all of the assignment fit together."

"Having assignments correlated with parts of our poster presentation really helped put it together."

"All of the assignments built on each other."

Conclusion

- During the poster presentations at the end of the quarter, many students commented on their ability to integrate knowledge and practice.
- Students were able to identify how ethics, policy, and research affected their work in the community
- Scaffolding allowed students to complete parts of the poster during the quarter while receiving feedback that could be integrated into the final poster
- The final assignment that integrated different competencies with students' practicum experiences was a better demonstration of their learning than multiple separate assignments
- The poster presentation at the end was appropriate to the discipline of social work and graduates' future professional practice

Acknowledgements

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Image from
<https://www.clipartmax.com/so/poster-presentation/>

Berrett, D. (2012, August 3). College Too Easy? UCLA Makes It Tougher. (Cover Story). *Chronicle of Higher Education*, pp.A1-A11.

Meaningful Play: Students Creating Serious Tabletop Games

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π Rationale for Approach

1. **Wanted students to create a game, rather than just play one.** Game making has the potential to be a powerful learning environment (Smeets 2005; Wonica 2015).
2. Opted to focus on an analog serious games instead of digital because of time and technical constraints.
3. Resurgence of table-top games in the last couple of years. Analog games often overlooked as serious games.

π Stages to Game Creation

- › **Pitch** – Oral presentation of idea to class, stressing problem game will solve.
- › **Ruleset** – Rules of play and operation of the game
- › **Prototype** – Physical construction of the game
- › **Playtest** – Test of the game with actual players

Revision and Refinement

π Game to teach teens about social media pitfalls



Benefits of Serious Games

- Teach problem solving, strategic thinking, and cognitive flexibility (Adachi & Willoughby 2013; Gee 2007; Green et al. 2012).
- › Provide a learning tool that is “anytime-anyplace” (Kato 2010).
- › Develop literacy skills (Bogost 2010).
- › Provide many applications both in a workplace setting and in the classroom (Sitzmann 2011; Squire 2013).

π Student Projects

- › Board game to teach financial literacy to college students
- › Board game designed to teach math for a prison-based high-school equivalency program
- › Card game designed to teach the community about microchipping pets
- › Board game to teach high school students about mythology
- › Card game to teach about workplace team building

π Final Student Thoughts About Project

Allowed me to further develop the way I think about issues which carried over into skill acquisition and development. I loved that the class required you to use your hand and build the Analog game!

Being forced to gamify something and figure out how to make it interesting without losing the core of the idea felt like a valuable lesson.

Course has taught me a new way of thinking about problems in our society and how to present these issues in such a way that a person wants to learn more once the game is finished.

Before this class, I never considered teaching with a game. Now, I've created my own game and can see myself creating more games to use in the classroom.

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π Prototype of game to teach about poverty/homelessness



π Pedagogical Benefits

- Students engaged in a series of critical decisions while developing their game.
- Developed skills in design, problem-solving, and acquired a sense of ownership to the games they designed.
- Had a stronger sense of game design features, but also acquired skills more familiar to and accepted by the academic community.

References

- Bogost, Ian. 2010. *Persuasive Games: The Expressive Power of Videogames*. Cambridge, MA: MIT Press.
- Gee, James P. 2007. *Good Video Games + Good Learning*. New York: Peter Lang.
- Green, C. Shawn, and Daphne Bavelier. 2012. “Learning, Attentional Control, and Action Video Games.” *Current Biology* 22 (6): 197–206.
- Kato, Pamela M. 2010. “Video Games in Health Care: Closing the Gap.” *Review of General Psychology* 14 (2): 113–21.
- Sitzmann Traci. 2011 “A Meta-Analytic Examination of the Instructional Effectiveness of Computer-Based Simulation Games.” *Personnel Psychology* 64 (2): 489–528.
- Smeets, Ed. 2005. “Does ICT contribute to powerful learning environments in primary education?” *Computer Education* 44 (3): 343–355.
- Smith, Roger D. 2009. *Military Simulation & Serious Games: Where We Came From and Where We Are Going*. Modelbenders LLC.
- Squire, Kurt D. 2013. “Video Game-Based Learning: An Emerging Paradigm for Instruction.” *Performance Improvement Quarterly* 26 (1): 101–30.
- Wonica, Peter. 2015. “Learning to Evaluate Analog Games for Education.” *Analog Game Studies* 6 (1): 61–70.

Municipal Portuguese and Mathematics Olympics



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SUMMARY

The Municipal Olympiad of Portuguese Language and Mathematics project is justified in proposing to enhance studies, motivate students, considering curricular contents pertinent to elementary education that contemplate the skills and abilities presented at the BNCC, in the Common Curriculum of Bauru Elementary School and in the reference matrix of Prova Brasil. Among the main objectives, we highlight the implementation of an internal evaluation, aimed at verifying the performance of elementary school students in the Municipal System of Education of Bauru, besides stimulating and promoting the study of Portuguese Language and Mathematics. The previous analysis of the results demonstrates advances in the quantity of correctness of the tests and relevance to the understanding of what is expected in the questions, making possible the learning.

2. METHODOLOGY

The OMLPM project is justified by the need to boost studies through a tool that tends to motivate students, consider curricular contents pertinent to cycles I and II of elementary education that contemplate the competences and abilities presented in the National Curricular Common Base (BNCC), in the Common Curriculum of Fundamental Education of the Municipality of Bauru, as well as in the reference matrix of Prova Brasil.

In its first version in 2017, the OMLPM was directed to 9th grade students, with the purpose of making a diagnosis about students' academic performance, stimulating and promoting the study of Portuguese Language and Mathematics, contributing to the improvement of quality of basic education, to encourage students to continue their studies, as well as contribute to the elaboration of Action Plans to overcome possible learning lags, aiming at a better performance in the Prova Brasil. After evaluating the results obtained in 2017, we observed the need to change the target audience, so that in 2018 the OMLPM began to be targeted to students in the 4th and 8th grades, with the intention of identifying early learning lags, based on the development of punctual Action Plans, allowing students to perform more assertively in the large-scale tests applied in the 5th and 9th grades. In 2019 the OMLPM will be held in the same format as in 2018.

With the intention of involving the whole school community in the OMLPM, giving meaning and significance to the action, it was decided to set up an Organizing Committee, composed of the pedagogical coordinator of the school units (responsible for OMLPM in the School Unit), generalist teachers and specialists.

The teachers of each school unit, along with the pedagogical coordinator, selected ten questions already on large-scale tests in a database of available questions online, emphasizing that these questions are elaborated contemplating the descriptors of the Reference Matrix of the Prova Brasil. The option for questions with this format is justified by the fact that they are in compliance with the Item Response Theory (TRI), that besides allowing the comparability of the results between the grades, it also allows the application of the test several times a year. The comparison of results is possible since, with TRI, a metric scale is established. Thus, starting from the analysis of the distractors, among other elements, it is possible to verify which contents need more attention. OMLPM 2018 was carried out in two phases, the first one being characterized by the application of objective test, with twenty questions of multiple choice and a single correct answer in each question, both for Mathematics and for Portuguese Language and also happened in two days, being one day for Portuguese Language and another for Mathematics, in both phases. The second phase was characterized by the application of the test with objective questions in Mathematics, contemplating the same descriptors of the 1st phase, with increased level of difficulty and composed of twenty questions. The Portuguese Language Test Proposed for the 8th grade was a writing activity with a theme defined by the Organizing Committee, including descriptors existing in the first phase. For the 4th grade, ten questions of text comprehension were selected, with multiple choice, considering the descriptors of the 1st phase with an increased degree of difficulty.

It is important to point out that for the second phase, special tests were developed by the special education teachers for the students in attendance in the multifunctional resource rooms, an unprecedented procedure in large-scale tests. The personalization was based on the tests applied in the first phase, respecting the established descriptors. The performance of these students is being analyzed by the Division of Special Education, however, the previous analysis of the results demonstrates advances in the number of correct answers of the tests, that is, the presentation form of the question demonstrates great relevance for the understanding of what is expected in the question.

1. INTRODUCTION

Evaluations, both internal (essential for the development of pedagogical work, analyzing students' achievement, mastery of content and learning progress of the classroom) and external (applied to a large number of participants), a verification of the results of actions directed to the achievement of previously established and planned goals and objectives are continuous and indispensable for the development of pedagogical work in the school environment. Different evaluation processes are developed considering the diversity of methodologies and analyzes used.

In addition to stimulating and promoting the study of the Portuguese Language and Mathematics and aiming to verify the performance of the students in the Bauru Municipal Teaching System, we observed the need to implement an internal evaluation, in this sense, the Portuguese Language Portuguese Olympiad Mathematics (OMLPM)

3. RESULTS AND DISCUSSION

After the tests of the two phases of the OMLPM 2018, data tabulation in Portuguese Language and Mathematics was carried out, with the classes of the 4th and 8th grades, based on the number of templates and distractors, allowing for the analysis and survey of the descriptors which need more attention and a plan of action that allows the appropriation of relevant contents.

In view of the obtained results it was possible to diagnose the descriptors that presented: greater learning difficulty (more than 75% error); those that need attention (between 25% and 75% error) and those that have already been consolidated or that need some adjustment (up to 25% error).

When we observed the total of jigs and distractors pointed out in the 1st and 2nd stage tests of the 4th grade of the sixteen schools, twelve showed good performance in the 1st phase and significant progress in the 2nd phase. We are struck by the fact that four School Units perform below expectations. An analysis suggests that the Action Plan outlined by the School Units did not reach the expected goal, so a timely action by the area coordination at the School Unit is necessary. As for the performance of the 8th grade in the two phases, we observed low performance, both in Portuguese and Mathematics, a fact that draws our attention, also requiring an effective action of the area coordination at the School Unit. It is noteworthy that three schools had satisfactory income in the writing.

Based on these data, we can infer that specific learning difficulties need to be addressed in order to provide significant and meaningful learning for students. It is necessary that teacher and student become subjects of the activity in this process of development, this activity must be able to enable reflection, the voluntary character of their actions, as well as the establishment of an internal plan, characteristic of theoretical thinking. Thus, the intentionality of the teacher to carry out the teaching should be the starting point, establishing a plan of action through the knowledge of the idealized object, theoretical assumptions, definition of actions supported by these presuppositions, instruments mediating these actions, analysis and synthesis, aiming its activity, allowing a qualitative leap in student learning, and, thus, the development of the psyche. In activity, the psychological functions of the subjects who perform it are developed.

4. FINAL CONSIDERATIONS

As for the general objectives of OMLPM 2018, we could see that they were mostly contemplated. Both teachers and students were stimulated to research and study, allowing intentional access to problem banks, simulated and institutional tests, as well as problem situations that promote the development of logical reasoning, contributing to the improvement of the quality of basic education.

The major contribution was the initial evaluation (diagnosis) about the students' school performance, contributing to the preparation of Action Plans to overcome possible learning lags and serving as a basis for the preparation of the 2018/2019 planning.

With the analysis of the results and suggestions of all those involved in the process, we will guide our work to 2019. Believing and thus materializing learning, improving the quality of teaching and, consequently, the result in IDEB (Index of Development of Basic Education) of elementary schools from the 6th to the 9th grade year.

REFERENCES

ASBAHR, F.S.F. Sentido pessoal, significado social e atividade de estudo: uma revisão teórica. **Revista Quadrimestral da associação Brasileira de Psicologia Escolar e educacional**, v.18, n.2, Maio/Agosto, p.265-272, 2014.
BAURU. Currículo Comum das Escolas Municipais. 2012. Disponível em: <http://www.bauru.sp.gov.br/arquivos/arquivos_site/sec_educacao/dpppe/curriculo.pdf>. Acesso em: 14 Out. 2017.
FIORENTINI, D.; LORENZATO, S. **Investigação em Educação Matemática**: percursos teóricos e metodológicos. Campinas, SP: Autores Associados, 2012.
CAED. **Guia de elaboração de itens**. Juiz de Fora: 2008.
Brasil. Ministério da Educação. PDE : Plano de Desenvolvimento da Educação : **Prova Brasil : ensino fundamental : matrizes de referência, tópicos e descritores**. Brasília : MEC, SEB; Inep, 2008. 200 p.: il.



e-Learning & Innovative
Pedagogies

What neuroscience suggest for value-based problem solving

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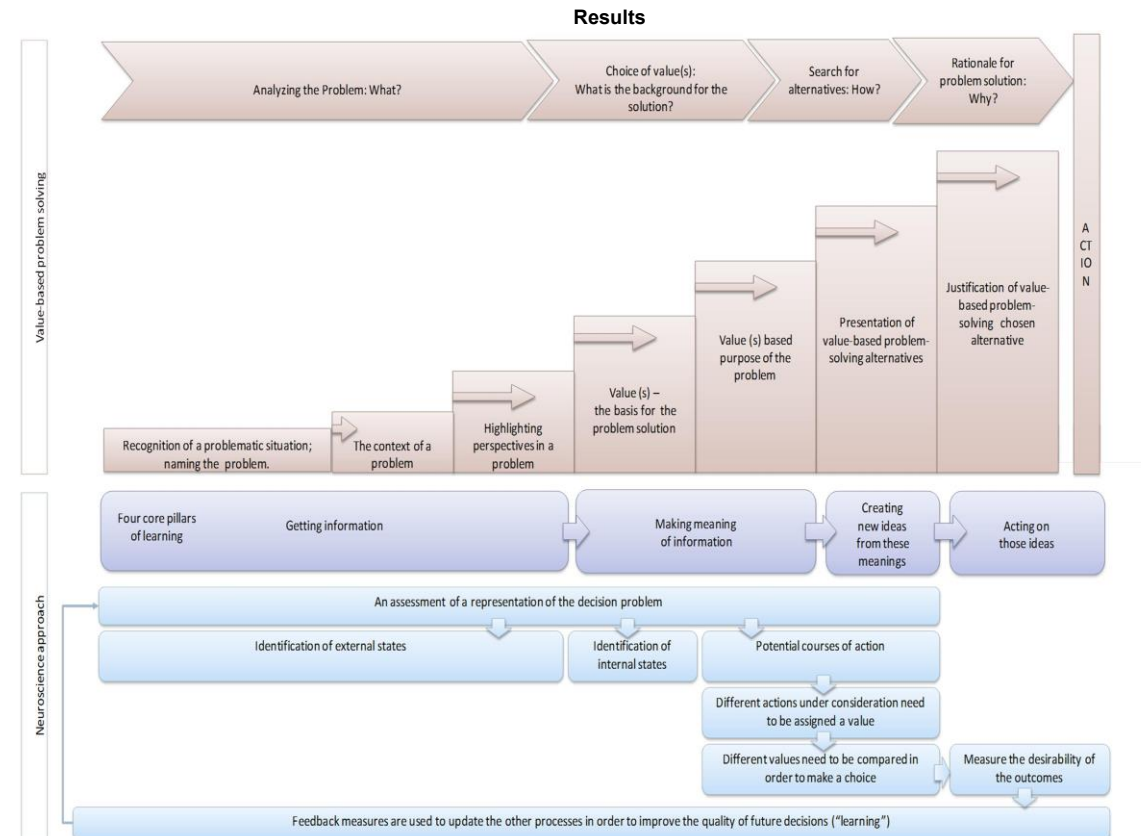
Introduction. Problem solving based on complexity and collaborative approaches is listed between the core competencies needed for the future professionals (PISA, 2015). The importance of problem solving along with critical thinking and creativity remains important (World Economic Forum, 2016).

Background. Problem solving is one of the most meaningful and most important ways of learning (Jonassen, 1997). Whereas values guide and influence personal behavior encompassing ethical aspects of solutions (Schwartz, 2012; Hall & Davis, 2007; Keeney, 1994), they represent the essential foundation of problem solving. However, most of problem solving models represent the rational economic approach, highlight only the procedural process of problem solving and focus on the development of skills and competences. Attempts to integrate moral issues as well as values deals with decision-making (Hall & Davis, 2007; Keeney, 1994).

Researchers representing the classical approach to problem solving do not emphasize learning. Meanwhile, neuroscience reveals new possibilities for problem solving. Neuroscience research (Zull, 2004) suggests that deeper learning could be attaining when engaging more of different regions of the cerebral cortex. In this case, four core pillars of learning could be developed - getting information, making meaning of information, creating new ideas from these meanings, and acting on those ideas. Rangel, Camerer, & Montague (2008) argue that value-based decision-making is pervasive in nature. It occurs whenever an organism makes a choice from several alternatives based on the subjective value that it places on them and this process includes five steps.

The lack of research in regard to integration of values when solving problems allows for the formulation of the **research question**: When and how learner should take into account values when solving a problem? The purpose of this paper is to introduce the hypothetical framework enabling the development of value-based problem solving capability based on evidence from neuroscience research.

The **literature review method** seeks to identify what has been accomplished previously, allowing for consolidation, for building on previous work, for summation, for avoiding duplication and for identifying omissions or gaps (Grant & Booth, 2009).



Conclusions

- The evidence from neuroscience reveals new possibilities for value-based problem solving. Value-based problem solving learning through each stage encompasses core pillars of learning presented in neuroscience approach and value-based problem solving as a learning process emerges.
- From the perspective of education, introduced framework provides a learner with a tool, which enables value-based problem solving capability development.
- Like many other models, the limitation of this framework is related to the adoption of value-based problem solving chosen alternative by an action.
- The essence of this model is to consolidate thinking about values in the course/process of learning.
- Future directions must be concerned with the designing educational environments for implementing and verifying presented framework.

References

1. Grant, M. J., & Booth, A. (2009). A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Information & Libraries Journal*, 26(2), 91-108.
2. Jonassen, D. (2011). Supporting Problem Solving in PBL. *Interdisciplinary Journal of Problem-based Learning*, 5(2), 95-119.
3. Keeney, R. L. (1994). Creativity in decision making with value-focused thinking. *MIT Sloan Management Review*, 35(4), 33-41.
4. Rangel, A., Camerer, C., & Montague, P. R. (2008). Neuroeconomics: The neurobiology of value-based decision-making. *Nature reviews. Neuroscience*, 9(7), 545.
5. Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online readings in Psychology and Culture*, 2(1), 1-20.).
6. Zull, J. E. (2004). The art of changing the brain. *Educational Leadership*, 62(1), 68-72.

Intersecting Perspectives to Address the Challenges in Education

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Introduction

The researchers used a collaborative research process to address current issues and challenges in education.

Abstract

Through best practices in research collaboration, the researchers developed and conducted research to address the excellence gap.

Background

To effectively collaborate on research, the steps of the research process should be clearly defined. The steps typically include research design development, literature review, data collection, data analysis, and writing of article and results. To be effective, each member of the research team should take a leadership role in conducting one of the steps in the research process.



Research

The purpose of the collaborative study was to explore the resources and strategies parents of Gifted and Talented diverse learners perceive to be most helpful in supporting the home to ensure academic success and close the excellence gap.



Participants

Gifted and Talented diverse learners and their families.



Methods

Workshops were provided to the students and their families. Following the workshops, surveys were conducted to gather data related to the purpose of the study.



Results

The results indicate that a family engagement workshop is an effective strategy for closing the excellence gap for Gifted and Talented diverse learners.



Conclusions

By effectively collaborating to conduct a research study, the strategy of family engagement workshops for closing the excellence gap for Gifted and Talented diverse learners was designed and implemented. School districts can implement similar workshops to meet the needs of diverse learners in their schools.



Reference

Nyberg, J., LaCour, M., Dees, L., & Hansen, L. (2018). Closing the excellent gap for English Learners and students of color. ASCD InService. Retrieved from <http://inservice.ascd.org/closing-the-excellence-gap-for-english-learners-and-students-of-color/>